Commercial FERTILIZERS

Report for 1965

Part II: List of Registrants,
Tonnages Sold, and Analyses.

H. J. FISHER

Chemist Emeritus

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Analyses were made by Messrs. Richard A. Botsford, Sherman Squires, Werner Mueller, Charles Hahn and Miss Helen Kocaba; inspection and sampling by Mr. R. Richard Nichols; compilations by Mrs. Marilyn Fishbone.

REPORT ON INSPECTION AND AMALYSIS OF COMMERCIAL FERTILIZERS

1965

Part II: List of Registrants, Tonnages Sold, and Analyses
H. J. Fisher, Chemist Emeritus

INTRODUCTION

For the first time last year the annual fertilizer report was issued in two parts: 1

Part I consisted of a table listing the number of fertilizers sampled, the number of guaranties made for these samples, the number of samples found deficient, and the average percentage of the claimed guaranties found present, for each manufacturer: this table did not show actual analyses of individual brands. This circular was designed with two purposes in mind: It would enable a quick comparison of the products of different manufacturers with regard to which gave the best value for the money after allowance was made for the fact that an excess over guaranty of one ingredient could offset a deficiency in another; and it could be prepared for publication more quickly than the former type of report, and therefore be in the fertilizer user's hands soon enough to be useful in guiding his purchases. A similar circular has been issued covering the 1965 inspection.

For those who desired the actual analytical results on individual samples, the names and addresses of all registered (and some unregistered) manufacturers, tonnage data, etc., Part II of the 1964 report was issued as Bulletin 671; the present bulletin covers the same data for the 1965 inspection. These bulletins follow more closely the annual reports of previous years, but they differ in one important respect, namely, that in the table on mixed fertilizers all fertilizers of each grade ratio are placed together. Each bulletin also contains a special table on the water-soluble phosphoric acid content of certain grades that was requested by potato growers.

Comments on this new method of reporting are still solicited.

CONNECTICUT LAW AND REGULATIONS REGARDING COMMERCIAL FERTILIZERS

The term "commercial fertilizers", as used in the Connecticut fertilizer statute, includes "any and every substance imported, manufactured, prepared or sold for fertilizing or manuring or soil amendment purposes, except barnyard manure and stable manure which have not been artificially treated or manipulated, marl and lime." An amendment of the law in 1949 permitted fertilizers to be labelled with guaranties of elements other than nitrogen, phosphorus and potassium, but did not change the requirement that mixed fertilizers must contain at least 0.82 per cent of nitrogen, and 1 per cent of either phosphoric acid or potash, for guaranties of these elements to be made. Phosphorus must be declared as available phosphoric acid (except in the case of bone, tankage and other

¹Conn, Agr. Expt. Sta. Circular 226 (1965); Bulletin 671 (1965).

²Conn. Agr. Expt. Sta. Circular 228 (1966).

natural organic materials, where total phosphoric acid may be guaranteed instead), and potassium as water-soluble potash; all other elements must be guaranteed in terms of percentages of the elements, not as oxides or salts. A registration fee of \$10.00, payable annually, is charged for each element guaranteed in each brand of fertilizer; there is also a six cent tonnage tax payable semiannually.

While manufacturers usually register their own fertilizers, if a retailer sells a fertilizer manufactured by an out-of-state firm, and that firm refuses to register, under the law the retailer is responsible for registration fees and tonnage taxes. The retailer, therefore, should assure himself that the requirements of the law have been met by the manufacturers of the brands which he handles, or himself be prepared to meet all these requirements.

The law exempts from registration, and from other requirements, only: (1) fertilizers passing through the State in transit; (2) fertilizers and fertilizer materials shipped to regular fertilizer factories to be used for manufacturing purposes; and (3) fertilizers and fertilizer chemicals sold to The Connecticut Agricultural Experiment Station for experimental purposes.

> Cottonseed, linseed, peanut and soybean oil meals, when sold or used for fertilizer purposes must be registered as fertilizers and the specified fees paid thereon. For such products the registration fee is \$10.00 per brand. This fee and the tonnage tax are entirely apart from the registration fee required by the feeding stuffs law for vegetable meals used as feeds (there is no tonnage tax on feeds).

> Because manufacturers or jobbers do not know how much, if any, of their vegetable meal tonnage is sold or used as fertilizers, local dealers and purchasers report their sales or purchases to this This information is not for publication but is used to inform manufacturers of the total sales of their meal as fertilizer in this State. It is expected that the fees provided for by statute will be paid by the manufacturer or other party responsible for the brands.

OFFICIAL DEFINITIONS OF FERTILIZER TERMS AND MATERIALS

It is expected that fertilizers sold in this state will comply with the regulations and standards of the Association of American Fertilizer Control Officials. A copy of the "Official Publication" of that Association giving these definitions and regulations may be obtained from the secretary-treasurer, B. D. Cloaninger, Drawer 392, Clemson, South Carolina, for \$4.00.

FIRMS AND REGISTRATIONS

For 1965, 127 firms registered 735 brands of fertilizer for sale in this State. The following list gives the names and addresses of these manufacturers and the brands registered by them. Included also are the companies and brands whose products were not registered because they were sold only in packages of 10 pounds or less net weight; these are distinguished by being starred. Listed also are a few companies whose products were not in small packages but failed to be registered. Brands not in small packages that were unregistered for any reason are marked with a /.

Mfr.

No.

Name, Address and Brands

 AGRICULTURAL PRODUCTS CO., INC., 589 Atwells Ave., Providence 9, R.I.

> /APCO Country Club 20-10-5 Lawn Fertilizer /Blue Ribbon Lawn and Garden Fertilizer 5-10-5 Comet 5-10-5 Golden Comet 10-6-4 Guardian 8-6-4 /Spur Lawn and Garden 5-10-5 /Super Spur Lawn Food Super Turf King 10-6-4 Turf King 5-10-5

 AGRICULTURAL SUPPLY CO., 221 Richmond Ave., West Haven, Conn.

Yale Special Mixture 8-6-2

3. AGWAY, INC., 300 S. Geddes St., Syracuse, N.Y.

Agway 0-10-30 W/B

Agway 5-10-10 with 1.8 Mg

Agway 5-10-10 with 1.8 Mg and 0.02 Boron

Agway 10-6-4 60% of N from Ureaform

Agway 10-10-10

Agway 10-15-15 Taterbest

Agway 15-10-10 Super Formula

Agway 21-14-14

Agway 20 Phos 0-20-0

Agway 33 1/2 N Ammonium Nitrate Fertilizer

Agway Ferti Flow 10-20-10

Agway Ferti Flow 10-20-20

Agway Ferti Flow 12-12-12

Agway Ferti Flow 12-12-12 LC

Agway Ferti Flow 15-10-10

Agway Ferti Flow 15-15-15

Agway Ferti Flow 16-8-8

Agway Ferti Flow 18-46-0

AGWAY, INC., 300 S. Geddes St., Syracuse, N.Y. - Cont. 3.

Agway Free Flow 0-10-30 W/B

Agway Free Flow 0-10-40

Agway Free Flow 0-15-30

Agway Free Flow 0-20-20

Agway Free Flow 0-25-25

Agway Free Flow 5-20-20

Agway Free Flow 8-16-16 Agway Free Flow 10-10-10

Agway Muriate of Potash 0-0-60

Agway Special Starter 20-20-20

Agway Start-N-Gro 16-32-16

Agway Sulfate of Ammonia

Agway Sulfate of Potash

Eastern States 0-25-25

Eastern States 5-10-10

Eastern States 8-16-16

Eastern States 10-5-5 Green Lawn

Eastern States 10-5-5 Green Lawn with Dacthal

Eastern States 10-6-4 Lawn Special

Eastern States 10-15-15

Eastern States 10-15-15 Taterbest with 1.2 Mg

Eastern States 10-20-10

Eastern States 10-20-20

Eastern States Evergreen Plant Food 8-8-8

Eastern States Plant Food 5-10-10

Eastern States Start-N-Gro 16-32-16

Squire Applegate Composted Cow Manure 1-1-1

Squire Applegate Composted Sheep Manure 1-1-1

Eastern States Triple Superphosphate

Eastern States 12-12-12 LC

Squire Applegate Evergreen Plant Food 8-4-4 with O. N.

Squire Applegate Garden Plant Food 5-10-5

Squire Applegate Greenlawn 10-5-5

Squire Applegate High Organic Nitrogen 10-6-4

Squire Applegate High Organic Nitrogen Plant Food with Dieldrin 10-6-4

Squire Applegate Lawn Starter Fertilizer 10-20-20

Squire Applegate Organic Plant Food 5-4-0

Squire Applegate Pro-Green Granular 16-8-8

Squire Applegate Rose Food 5-10-5

Squire Applegate Sol-U-Green 20-20-20

Squire Applegate Special Weed 'N' Green Turfood &

Weed Control Plus Chickweed Killer

Squire Applegate Steamed Bone Meal

Squire Applegate Sulfate of Ammonia

Squire Applegate Turfood 8-6-4 and Crabgrass Killer with Zytron

Squire Applegate Weed 'N' Green Turfood and Weed Control

ALASKA FERTILIZER CO., 84 Seneca St., Seattle 1, Wash. 4.

Alaska Deodorized Fish Fertilizer

 ALLIED CHEMICAL CORP., Nitrogen Division, P.O. Drawer 61, Hopewell, Va.

"Arcadian" Ammonium Sulfate

"Arcadian" Gold-AN (Pelleted Ammonium Nitrate)

"Arcadian" Golden Uran 30 Solution

"Arcadian" Golden Uran 32 Solution

"Arcadian" Nitrana 3 Solution

"Arcadian" Nitrate of Soda

"Arcadian" Poly-N

"Arcadian" Urea 45 Fertilizer Compound (Pelleted)

/Solvay Calcined Potassium Carbonate
USB Standard 62% Muriate of Potash

 AMERICAN AGRICULTURAL CHEMICAL CO., 285 River St., North Weymouth 91, Mass.

AA Plant Food 5-10-5

AA Plant Food 10-6-4

AA Quality Fertilizer 0-15-30

AA Quality Fertilizer 0-20-20

AA Quality Fertilizer 5-10-5

AA Quality Fertilizer 5-10-10 with 1.2 Mg

AA Quality Fertilizer 8-16-16

AA Quality Fertilizer 10-10-10

AA Quality Fertilizer 15-10-10

AA Quality Fertilizer Muriate of Potash

AA Quality Phosphate Rock

Agrico 1-2-3 Pre-Emergence Insect Control with Fert.

Agrico A. C. R. Fertilizer

Agrico Country Club Fertilizer 10-6-4

Agrico Country Club Fertilizer 12-4-8

Agrico Country Club Fertilizer 16-8-8

Agrico Evergreen Fertilizer

Agrico for Corn

Agrico for Lawns, Trees and Shrubs

Agrico for Plowdown

Agrico for Potatoes

Agrico for Top Dressing 10-10-10

Agrico for Top Dressing 12-12-12

Agrico for Top Dressing 15-15-15

Agrico Garden and Lawn Fertilizer

Agrico Grass Food 10-6-4

Agrico Grass Food 16-8-8

Agrico Insect Control with Fertilizer

Agrico Phosphate & Potash

Agrico Rose Food

Agrico Weed Control with Fertilizer

Agrinite Plant Food

Agri-Phos Superphosphate

Homestead All PurposeFertilizer 8-8-8

/Homestead Custom Lawn Food 20-10-5

Homestead Farm Style Fertilizer 5-10-5

Homestead Farm Style Fertilizer 10-6-4

Homestead Weed & Feed Fertilizer 10-6-4

7. AMERICAN CYANAMID CO., P.O.Box 400, Princeton, N.J.

> Aero Cyanamid Granular - 20.5% Aero Cyanamid Granular - 21.0% Aero-Phos Ammonium Phosphate 11-48-0 Aero-Phos Diammonium Phosphate 18-46-0 Aero Phosphoric Acid Aeroprills Ammonium Nitrate Aero Urea Coated Prills Amanol Nitrogen Solution

8. AMERICAN FERTILIZER CO., P.O. Box 6940-A. Chicago, Illinois

Trebo-Phos Triple Superphosphate

(Registered by International Minerals & Chemical Corp., P.O. Box 230, Woburn, Mass.)

Gold Seal 20-10-5 Lawn Food Top Turf 20-10-5 Lawn Food

9. AMERICAN HUMATES, INC., Fidelity Union Tower, Dallas, Texas 75201

Agua Humus

ARCHER DANIELS MIDLAND CO., 733 Marquette Ave., 10. Minneapolis, Minnesota

> Osmocote 14-14-14 Osmocote 18-9-9 Osmocote 36-0-0

11. ARMOUR AGRICULTURAL CHEMICAL CO., P.O. Box 10, Carteret, New Jersey

> Armour Armorganic Plant Food Armour Big Crop Fertilizer 0-20-20 Armour Big Crop Fertilizer 5-8-7 Armour Big Crop Fertilizer 5-10-5 Armour Big Crop Fertilizer 5-10-10 Armour Big Crop Fertilizer 7-7-7 Armour Big Crop Fertilizer 10-10-10 Armour Big Crop Superphosphate Armour Bone Meal Fertilizer Armour Cattle Manure 2-1-2 Armour Gold Bond Tobacco Grower 6-3-6 Armour Home & Garden Special 5-10-5 Armour Lawn Special 10-6-4

Armour Lightweight Vertagreen 18-6-9 with Magnex

Armour Lightweight Vertagreen 20-10-5 Armour Sheep Manure 1.25-1.00-2.00

Armour Vertagreen for Acid Loving Plants 5-10-10

Armour Vertagreen Double Duty Lawn Treatment 10-6-4 with 2, 4-D

Armour Vertagreen Triple Duty Lawn Treatment 10-6-4 Armour Vertagreen for Lawns & Gardens

Armour Vertagreen Plant Food 5-10-5

Armour Vertagreen Plant Food for Commercial Crops

11. ARMOUR AGRICULTURAL CHEMICAL CO., P.O. Box 10, Carteret, New Jersey - Cont.

Armour Vertagreen Plant Food for Turf & Trees 10-6-4 with Magnex

Armour Vertagreen Rose Food 5-10-5

*Armour Vertagreen Tomato Plant Food 6-12-12

Armour Vertagreen 10-6-4 for Turf (60% Org. Nit.)

Armour Vertagreen Turf Food 10-6-4 with Chlordane

Armour Vertagreen Turf Formula 8-6-2 (60% Org. Nit.)

Garden Mark Lightweight Lawn Food

Vallegreen Lawn Fertilizer 20-10-5

12. ASGROW SEED CO., P.O. Box 406, New Haven, Conn.

Asgrow 10-6-4

Asgrow 3-way with Bandane

Asgrow Easy-Gro Lawn Food

Asgrow Gro-Sod Lawn Food

Asgrow Weed-Nix Lawn Food with 2, 4-D and Silvex

Breck's 10-6-4

Breck's Big-3

Breck's Feed-no-Weed with 2, 4-D

Breck's Garden-Gro

Breck's Greenite

Breck's Turf-Gro

13. ATLANTIC SEED CO., Martinsville, New Jersey

(Registered by Loft's Pedigreed Seed, Inc., Chimney Rock Road, Bound Brook, New Jersey)

Atlantic's Lightweight Fertilizer

Atlantic's Weed & Feed

14. *ATLAS FISH FERTILIZER CO., 1 Drumm St., San Francisco, California

Atlas Fish Emulsion Fertilizer 5-1-1

15. THE F. A. BARTLETT TREE EXPERT CO., 2770 Summer St., Stamford, Connecticut

Bartlett Green Tree Food

16. /THE BAUGH CHEMICAL CO., 25 S. Calvert St., Baltimore, Maryland 21202

Ground Undissolved Phosphate Rock

17. *BLACK MAGIC, INC., Box 578-P, Hermosa Beach, Calif.
Black Magic African Violet Blossom Booster 4-10-10

18. BLACKSTONE GUANO CO., INC., 2000 Chesapeake Ave., Baltimore, Maryland 21226

Fairlawn Fertilizer 5-10-5

Fairlawn Fertilizer 10-6-4

Fairlawn Fertilizer 25% Org. Nit., 1.5 W.I.N.

18. BLACKSTONE GUANO CO., INC., 2000 Chesapeake Ave., Baltimore, Maryland 21226 - Cont.

Fairlawn Lawnfood 10-6-4 and Weed Killer Fairlawn Lawnfood 5% W.I.N. Fairlawn Lawnfood 100% Nat.Org. Mat. Lawn Wood Lawnfood & Weed Killer

/Plantation Crabgrass Preventer & Lawn Food 10-6-4

Plantation Fertilizer 5-10-5 Plantation Fertilizer 10-6-4

Plantation Lawnfood 5% W.I.N.

/Plantation Weed Killer & Lawn Food 10-6-4

Ranch Home Fertilizer

/Finelawn 5-10-5 Fertilizer

/Finelawn 5-10-10 Azalea & Camellia Food

Finelawn 7-10-5 Rose Food

Finelawn 8-8-8 General Purpose Finelawn 10-6-4 3 in 1 Lawn Food

Finelawn 10-6-4 Weed & Feed Lawn Food

Finelawn 10-6-4 25% Org. Nit.

Finelawn 20-10-5 Lawn Food

(Finelawn products were packed for E.J. Korvette, Inc.)

 BONIDE CHEMICAL CO., INC., 382 N. Genesee St., Utica, New York 13502

> /Adams Nursery Mart Weed & Feed Granules 17-4-4 /Glen Terrace Nurseries Weed & Feed Granules 17-4-4 /Garden Exchange, Inc. Weed & Feed Granules 17-4-4 /Platt's Weed & Feed Granules 17-4-4 Weed & Feed

20. THE BORDEN CHEMICAL CO., Div., The Borden Co., 350 Madison Ave., New York, New York 10017

Borden's "38" 38-0-0

21. BOYLE-MIDWAY, INC., 685 Third Ave., N.Y., N.Y. 10017

Heller-Gro 15-15-15 Plant Food
Heller-Gro Makes Lawns Green 32-0-0 Nitrogen Fertilizer

22. BROOKSIDE NURSERIES, INC., 228 Brookside Rd., Darien, Conn.

Brookside's Bone Meal

Brookside's Horn Shavings or Meal

Brookside's Nature's Evergreen

Brookside's Nature's Nutrients

Brookside's Nature's Lawn or Thrift

23. W.ATLEE BURPEE CO., 18th & Hunting Park Ave., Philadelphia 32, Pennsylvania

Burpee Lawn Food

24. CADWELL & JONES, INC., 199 Walnut St., Hartford, Conn.

/Cottonseed Meal - Castor Pomace Mixture (41% Protein)

C & J Hi Organic

C & J Homogeneous Gran. Fertilizer 5-10-5

C & J Homogeneous Gran. Fertilizer 5-10-10

C & J 7500 Lawn Food

C & J Lawn-Weed Killer

C & J Plant Food

CNA 3 in 1 Crabgrass Preventer w/Dacthal & Heptachlor

CNA Turf Food

CNA Weed & Feed

/Fishmeal (product of Peru)

Triple Superphosphate Granulated 46%

25. CARBOLA CHEMICAL CO., INC., Natural Bridge, N.Y. Carbola CCC Triple 20 Plant Food

26. /THE CANADA LINSEED OIL MILLS, LTD., 2215 Notre Dame St., East Montreal 24, Quebec, Canada Maple Leaf 34% Protein Expeller Linseed Oil Meal

27. PETER CASCIO NURSERY, INC., 2600 Albany Ave., West Hartford, Connecticut

Cascio's High Organic 10-6-4 Lawn Food

Cascio's Lawn Food & Weed Killer

Cascio's Organite

Cascio's Professional 5-10-5 Lawn Food

28. *CHEMAGRO CORP., Kansas City 20, Missouri Scope Systemic 2 in 1 Rose Care

29. CHEVRON CHEMICAL CO., Lucas St. & Ortho Way, Richmond, California 94804

Ortho Greenol Liquid Iron

Ortho-Gro Liquid Plant Food 12-6-6

*Ortho-Gro Liquid Plant Food 15-5-5

Ortho-Gro Starter Solution 8-16-8

Ortho Liquid Evergreen & Azalea Food 10-8-7

Ortho Liquid Rose Food 8-12-4

Ortho Liquid Tomato Food 6-18-6

Ortho Prilled Ammonium Nitrate Fertilizer 33.5-0-0

Ortho Unipel Fertilizer 10-20-20

Ortho Unipel Fertilizer 16-16-16

Ortho Unipel Fertilizer 20-10-10

Ortho Unipel Fertilizer 22-22-0

Ortho Unipel Starter Special Fertilizer 13-34-10

Ortho Up-Start 5-15-5

30. CHILEAN NITRATE SALES CORP., 120 Broadway, New York 5, New York

> Chilean Nitrate of Soda - Champion Brand Chilean Nitrate of Soda-Potash - Champion Brand

31. *CLINTON NURSERY PRODUCTS, INC., Clinton, Conn.

New Era African Violet Food 5-12-9 New Era Fish Plant Food 5-5-1 New Era Liquid African Violet Food 6-18-6 New Era Rose Food 10-20-10

32. CLORO-SPRAY CORP., 2215 N. American St., Philadelphia 33, Pennsylvania

> Cloro-Spray Fairway-Spray

33. COCKE & CO., 208 William Oliver Bldg., Atlanta, Georgia Cocke-Sure Brand 41% Protein Cottonseed Meal

34. CONSOLIDATED RENDERING CO., 525 Woburn St., Tewksbury, Massachusetts

> Corenco 0-15-30 Corenco 0-20-20 Corenco 5-8-7

Corenco 5-10-5 Corenço 5-10-5 Home Garden & Lawn Starter

Corenco 5-10-5 Rose Food

Corenco 5-10-10

Corenco 6-3-6 Perfection Corenco 6-3-6 Premium

Corenco 6-8-8 with 1.2 Mg

Corenco 7-7-7

Corenco 7-7-7 Rhododendron

Corenco 8-6-2 Landscape Corenco 8-6-4 Turf Green

Corenco 8-6-4 with Chlordane

Corenco 8-12-12 with 0.9 Mg

Corenco 8-16-16

Corenco 10-5-5 Organo

Corenco 10-6-4 Golf & Lawn

Corenco 10-6-4 Golf & Lawn with Dacthal

Corenco 10-6-4 Pro-Grass

Corenco 10-8-2 Timberline

Corenco 10-10-10

Corenco 15-10-10

/Corenco 15-15-15 Corenco Bone Meal

Corenco Liquid 5-10-10

Corenco Liquid 10-5-5

Cor enco Organic Turf

Corenco Sheep Manure with Inert Matter

Corenco 20% Superphosphate

Corenco Weed-B-Done 18-3-5

Dried Blood

/Cottonseed Meal

Muriate of Potash Sulphate of Ammonia

Triple Superphosphate 45% P2O5

- 35. *CROUCH POTTING SOIL & PRODUCTS CO., RFD 1, Norwich, Connecticut
 - Happy Jo Liquid Concentrate Plant Food 8-8-12
- 36. THE DANBURY GARDEN CENTER, Danbury, Connecticut Danbury Garden Center Lawn & Tree Food
- 37. THE DAVEY TREE EXPERT CO., 117S. Water St., Kent, Ohio Arbor Green 3-1-1 Arbor Green 4-1-2 Davey-Green Davey Tree Food
- 38. /DEANE SEED CO., 304 Main St., Wethersfield, Conn. Formula 22-35X Lawn Fertilizer 20-10-5
- 39. DELPHOS SOYA PRODUCTS CO., 234 S. Jefferson St., Delphos, Ohio 44% Protein Soybean Meal
- 40. E.I. DU PONT DE NEMOURS AND CO., 6054 Du Pont Bldg., Wilmington, Delaware 19898

Du Pont Nu Green Urea Fertilizer 45-0-0

Du Pont Trey Triple Action Lawn Aid 10-5-5 Du Pont Turf Food 20-10-10

Du Pont Turf Food 20-10-10 with 2,4-D

Du Pont Uramite Ureaform Fertilizer 38-0-0

Du Pont Uramite M Ureaform Fertilizer 38-0-0

Du Pont Urea Nitrogen Fertilizer

41. EASTERN DEHYDRATING CO., Route 7, Lexington, N. C.

> Fertal-Gro (Dehydrated Cow Manure-tobacco stem bedding) Fertal-Gro (Dehydrated Sheep Manure-tobacco stem bedding) Fertal-Gro 1.5-1-5 Sheep Manure Compost

/Fertal-Gro (T-Mulch Ground Tobacco Stems)

Green Acres (Dehydrated Cow Manure-tobacco stem bedding "No-Brand" (Dehydrated Cow Manure-tobacco stem bedding

- 42. ELANCO PRODUCTS CO., 740 S. Alabama St., Indianapolis, Indiana
 - (HO 70) Greenfield Double Action Rose Food

(HO 62) Greenfield Instant Plant Food

(HO 60) Greenfield Measured Release Lawn Food

(HO 61) Greenfield Measured Release Lawn Food with Broadleaf Weed Killer

(HO 40) Greenfield Triple Action Crab Grass Killer

(HO 48) Greenfield Double Action Evergreen & Azalea Food

(HO 49) Greenfield Double Action Plant Food Greenfield Springtime Triple Action

- 43. /JOHN W. ESHELMAN & SONS, Lancaster, Pennsylvania Solvent Extracted 41% Cottonseed Meal
- 44. THE ESPOMA CO., 6 Espoma Rd., Millville, New Jersey
 Bulb-Tone
 Espoma Organic
 Espoma Rose Food
 Garden-Tone
 Holly-Tone
 Turf-Tone
- 45. ESTATE FERTILIZER, Division, Morris Karp & Sons, 81 Secatogue Ave., Farmingdale, New York

 Estate 5-10-5
 Estate 10-6-4
- 46. EXCEL SEED CO., 5300 Katrine Ave., Downers Grove, Ill.

 Excel Lawn Food
- 47. /LEON EZZELL INC., 1538 Summer St., Stamford, Conn.
 Ezzell's Verdo Lawn Food 5-10-5
 Ezzell's Verdo Lawn Food 10-6-4 60% Org. Nit.
- 48. FAESY & BESTHOFF, INC., 143 River Rd., Edgewater, N.J.

 F & B Azalea-Camellia-Rhododendron Food 5-10-10

 F & B Cottonseed Meal

 F & B Evergreen Food 7-7-7

 F & B Garden Food

 F & B Pure Steamed Bone Meal 1-11.69-0
- 49. FARMERS ORGANIC CORP. 2459 Youngstown Rd., Ransomville, New York
 O'C Brand Dehydrated Cow Manure

F & B Rose Food 8-10-4

- 50. FARMERS ORGANIC., Linwood, North Carolina
 Barnyard Gem 1-1-1 (Dehydrated Cow Manure)
- 51. /FARMINGDALE GARDEN LABS., INC., 136 Verdi St., Farmingdale, New York

 Farmingdale Double Action Weed & Feed 20-10-5
 Farmingdale High Analysis Turf Food 20-10-5
 Farmingdale 3 in 1 Triple Action 10-6-4
- 52. FEDERAL CHEMICAL CO., 646 Starks Bldg., Louisville, Ky.
 Nu-Turf Fertilizer with Insecticide
 Nu-Turf Lawn Fertilizer

Nu-Turf Rose Food Nu-Turf Weed and Feed 53. FEDERAL CHEMICAL CO., Prospect Plains, Cranbury, N.J.

Federal Lawn Life for Gardens 5-10-10
Federal Lawn Life Plant Food 10-6-4
Federal Lawn Life Plant Food 20-10-5
Federal Lawn Life Plant Food Special '75'
Federal Lawn Life Plant Food Premium '150'
Federal Lawn Life Plant Food Superior '300'
/Hess Quality Approved Lawn Master Turf Food 10-6-4
Lawn & Garden 5-10-5
Lawn & Garden 10-6-4
/Lawn Master All Organic Plant Food 5-4-0
Lawn Master 5-10-5

Lawn, Master Turf Food 10-6-4

Lawn Master Turf Food 20-10-5

Lawn Master Turf Food 25% Org. Nit.

Lawn Master Turf Food 50% Org. Nit.

Lawn Master Turf Food 100% Org. Nit.

54. FIRST NATIONAL STORES, INC., East Hartford, Conn.
Emerald Green Lawn Food 12-5-7

Emerald Green Lawn Food 12-5-7 Emerald Green Plant Food 8-12-6

- 55. /GPG GRAIN CORP., Box 47, Norwalk, Connecticut Steamed Bone Meal
- 56. /THE GARDEN EXCHANGE CO., 4244 Madison Ave., Trumball, Connecticut

The Garden Exchange Inc. Lawn Food 10-6-4

57. GEIGY AGRICULTURAL CHEMICALS, Division, Geigy Chemical Corp., P.O. Box 430, Yonkers, New York

Geigy Sequestrene 138 Fe Iron Chelate

Geigy Sequestrene 330 Fe Iron Chelate

Geigy Sequestrene Na₂Cu Copper Chelate

Geigy Sequestrene NaFe Iron Chelate

Geigy Sequestrene Na₂Mn Manganese Chelate

Geigy Sequestrene Na₂Zn Zinc Chelate Geigy Sequestrene Zn 45 Chelate Granules

58. GENERAL PRODUCTS OF OHIO, Drew Pearson's Farms, P.O. Box 3107, Lexington, Ohio

Drew Pearson's Best Composted Cow Manure Drew Pearson's Best Composted Sheep Manure

Drew Pearson's Best Composted Sneep Manure

Drew Pearson's Best Dehydrated Sheep Manure

Village Green Dehydrated Cow Manure Village Green Dehydrated Sheep Manure

59. GLEN TERRACE NURSERIES, INC., 1960 Whitney Ave., Hamden, Connecticut

Glen Terrace Lawn Food 10-6-4

60. GODFREY'S GARDEN SHOP, Post Rd., Fairfield, Conn.

> (Registered by Miller Chemical & Fertilizer Corp., 3006 W. Cold Spring Lane, Baltimore, Md. 21215)

/Godfrey's Lawn & Tree Food 10-5-5

Godfrey's Professional Lightweight Turf Food 20-6-4 Godfrey's Professional Lightweight Turf Food 20-10-5

61. GOLDENROD OIL MEAL SALES CO., 727 Beale St., Memphis, Tennessee

> Goldenrod Brand 41% Protein Cottonseed Meal -Prime Quality

GOULARD & OLENA, INC., Skillman, New Jersey 62.

> (Registered by Miller Chemical & Fertilizer Corp.. 3006 W. Cold Spring Lane, Baltimore, Md. 21215)

G&O Bone Meal 1-11-0

/G & O Bone Meal 1-23-0

G & O Bulb Food

/G & O Composter

G & O Dried Blood

G&O Evergreen Food

G & O Hyganic Lawn Food

/G & O Lawn, Tree & Shrub Food 10-6-4 (35% Nit. is Org.)

G & O Plant Food for Acid Loving Plants

G & O Prime Cottonseed Meal

G & O Prizegro for Gardens

G&O Rose Food

/G & O Super Hyganic Lawn Food 12-6-6

/G & O Super Hyganic Lawn Food 12-6-6 with crabgrass & insect killer

4G & O Super Hyganic Weed Killer 12-6-6 with 2, 4-D

G&O Tomato & Fruit Food

/G & O Turf Food & Insecticide 10-6-4 with chlordane

/W.R.GRACE & CO., Davison Chemical Division, Hill Plant, Baltimore 3, Maryland

Davco 3-G Granulated Fertilizer 0-15-30

Davco 3-G Granulated Fertilizer 0-20-20

Davco 3-G Granulated Fertilizer 5-10-10

Dayco 3-G-Granulated Fertilizer 8-16-16

Davco 3-G Granulated Fertilizer 10-6-4

Davco 3-G Granulated Fertilizer 10-10-10

Davco 3-G Granulated Fertilizer 15-10-10

Davco Granulated 20% Superphosphate

Garden 5-10-5 Food

W.R.Grace & Co., Nitrogen Products Div., P.O. Box 277, 64. 147 Jefferson Ave., Memphis, Tennessee

Grace Urea Prills 45%

Grace Urea Prills 46%

Grace Urea Crystal 46%

65. THE GRAND UNION CO., 100 Broadway, E. Patterson, N.J.

(Registered by Dayton Fert. Corp., Dayton, N.J.)

Grand Union Brand Lawn & Garden Fertilizer 6-10-4

Grand Union Brand Lawn & Garden Fertilizer 10-6-4

Grand Union Brand Lightweight Lawn Fert. 15-7-5

Grand Union Brand Lightweight Lawn Fert. 20-10-5

66. THE GREENLIFE PRODUCTS CO., West Point, Virginia

Greenlife Azalea Food

Greenlife Cow Manure

Greenlife Evergreen Food

Greenlife Flower & Vegetable Fertilizer

Greenlife Rose Food

Greenlife Turf & Tree Food

Greenlife Vita Mend

67. GREEN RIBBON PRODUCTS CO., Sackett Point Road, North Haven, Connecticut

(Registered by The Hubbard-Hall Chemical Co., 28 Benedict St., Waterbury, Connecticut)

√Green Ribbon Formula 25 Lawn Food 10-6-4

Green Ribbon Plant Food

Green Ribbon Lawn Food

68. GRO FAST FERTILIZER ASSOCIATES, Chamberlain Rd., Windsorville, Connecticut

(Registered by The Hubbard-Hall Chemical Co., 28 Benedict St., Waterbury, Connecticut)

Gro Fast Lawn Food

Gro Fast Plant Food

69. HALSTEAD DISTRIBUTING CORP., Suttons Lane, Mount Kisco, New York

Just Right Fertilizer 5-10-5 Just Right Fertilizer 10-6-4

70. *HARRISON SPECIALTY CO., INC., Boston 67, Mass.

Chemton Liquid Plant Food 5-5-5

71. THE CHAS. C. HART SEED CO., 304 Main St., Wethersfield, Connecticut

Hart's All Organic Plant Food 5-4-0

Hart's All Purpose Plant Food 5-10-5

Hart's Crabgrass Killer & Lawn Fertilizer

Hart's Lawn Food

Hart's Lawn Weed Killer

Hart's Rose Food

Hart's Turf Food

Hart's Two for One

75.

- 72. HERCULES POWDER CO., Hercules Tower, 910 Market St., Wilmington, Delaware 19899

 Nitroform
- 73. HERITAGE HOUSE PRODUCTS, INC., 701 S. Front St., Philadelphia, Pennsylvania 19147

Heritage House Evergreen Plant Food
Heritage House Lawn Food
Heritage House Rose Food
Heritage House Three In One
Heritage House Tree and Shrub Food
Heritage House Weed Killer Lawn Food
Seaboard Lawn Builder
Seaboard Weed and Feed
Society Hill Lawn Feeder

74. HERSHEY ESTATES, INC., Hershey, Pennsylvania Ko-K-O Meal

A. H. HOFFMAN, INC., Landisville, Pennsylvania

- *Hoffman Azalea & Evergreen Food 4-6-10
 *Hoffman Concentrated Organic 6-8-5
 Hoffman Cow Manure (Dehydrated)
 *Hoffman Fertilizer for Gardens 5-10-10
 Hoffman Rose Food
 Hoffman Sheep Manure (Dehydrated)
 Hoffman Sterilized Bone Meal
 Mistress Mary Dehydrated Cow Manure
 Mistress Mary Fertilizer for Gardens
- 76. HOLDRIDGE FARM NURSERY, Route 27, Ledyard, Conn.

 (Registered by Miller Chemical & Fertilizer Corp.
 3006 W. Cold Spring Lane, Baltimore 15, Md.)

 Holdridge Turf Food 20-10-5
- 77. /HOOSIER SOIL SERVICE, INC., Bluffton, Indiana

Mistress Mary Sterilized Bone Meal

*enVee All Purpose Plant Food 8-8-8
enVee Lightweight Lawn Food 20-10-5
enVee Weed & Feed 10-6-4
Lawn Time Lightweight Lawn Food 20-10-5
*ReVive Evergreen Food 10-5-5
Suburban Pride Complete Lightweight Lawn Food 20-10-5
Suburban Pride Lawn Food with Weed Killer

78. THE HUBBARD-HALL CHEMICAL CO., 28 Benedict St., Waterbury, Connecticut

Bone Meal Borax, Gran. 8/40 Spec. Mesh, Tech. 99-1/2% pure Castor Pomace Cotton Hull Ashes Di Ammonium Phosphate 78. THE HUBBARD-HALL CHEMICAL CO., 28 Benedict St., Waterbury, Connecticut - Cont.

Dry Ground Fish

HH Blade Lawn Food

HH Bulb Food

HH Composted Cow Manure

HH Composted Sheep Manure

HH Cottonseed Meal

HH Dried Blood

HH Evergreen Food

HH Luxura Lawn Food

HH Muriate of Potash

HH Nitrate of Soda

HH Nitroganic With Weed Control, 2, 4-D & Silvex

HH Plant Food

HH Rose Food

HH Turf 'N Tree Food

HH Turf & Tree Food with Insect Control

HH 3 Way Turf 'N Tree Food

/Irsobin Nitrate of Potash (made in West Germany)

Lawncraft 12-4-8

Lawncraft Seed Starter

Lawncraft Tree & Shrub Food

Lawncraft Turf Food 8-6-4

Lawncraft Turf Food 10-5-5

Lawncraft Turf Food 10-6-4

Lawncraft Turf Food with Fish Base

/Lawncraft Turf Food 10-10-10 (25% Org. Nit.)

Lawncraft Turf Food (60% Organic)

Lawncraft VFT Turf Food

Lawncraft VFT Fortified Turf Food

Liberty Fertilizer 0-10-30

Liberty Fertilizer 0-15-30

Liberty Fertilizer 0-20-20

Liberty Fertilizer 0-25-25

Liberty Fertilizer 4-10-0

Liberty Fertilizer 5-8-7

Liberty Fertilizer 5-10-10

Liberty Fertilizer 5-10-10 with 1.2 Mg

Liberty Fertilizer 7-7-7

Liberty Fertilizer 8-16-16

Liberty Fertilizer 10-6-4

Liberty Fertilizer 10-10-10

/Liberty Fertilizer 10-20-20

Liberty Fertilizer 15-10-10

Liberty Fertilizer 15-15-15

Liberty Fertilizer 16-8-12

Liberty Super Bacco 6-4-7

Liberty Super Corn

Liberty Super Gro

Liberty Super Spud 6-8-8 with 1.2 Mg

Liberty Super Spud 8-10-10 with 1.2 Mg Liberty Tobacco Fertilizer

Liberty Plant Food

78. THE HUBBARD-HALL CHEMICAL CO., 28 Benedict St., Waterbury, Connecticut - Cont.

Muriate of Potash
Nitrate of Potash
Precipitated Bone
/State of Connecticut 10-6-4 25% Synt. Organic O WION
/Sulphate of Ammonia
Superphosphate,20%
Superphosphate, 46%
Woodruff's Lawn & Tree Food
/0-20-20 with 20 lbs. Borax per ton

\$\forall 0-20-20 \text{ with 20 lbs. Borax per ton} \forall 10-6-4 50\% Natural Organic 5.0 WION from Nat. Org. \forall 10-10-10 \text{ with 10 lbs. Borax per ton}

/20-6-4 Fertilizer 100% of Nit. is Org.

- 79. *HYDROPONIC CHEMICAL CO., INC., Copley, Ohio Hyponex All Purpose Plant Food 7-6-19
- 80. *THE HY-TROUS CORP., Boston, Massachusetts
 Hy-Trous Liquid Fertilizer 4-8-4
- 81. INTERNATIONAL MINERALS & CHEMICAL CORP.,
 5401 Old Orchard Road, Skokie, Illinois

 Diammonium Phosphate
 Muriate of Potash
 Sul-Po-Mag
- 82. INTERNATIONAL MINERALS & CHEMICAL CORP., 316 New Boston Street, Woburn, Massachusetts

/Calcium Nitrate (Irsobin) Made in Germany International - Sulfate of Potash New Formula Rainbow 5-10-10 New Formula Rainbow 8-10-10 New Formula Rainbow 10-10-10 New Formula Super Rainbow 5-10-30 New Formula Super Rainbow 10-10-10 New Formula Super Rainbow 10-15-15

New Formula Super Rainbow 15-10-10

- 83. /KAHN BROS. Co., Chicago 9, Illinois
 Kay-Bee Pel-Organic Turf Food 5-5-0
- 84. SPENCER KELLOGG, Division, Textron, Inc., 120 Delaware Ave., Buffalo, New York 14240

 Spencer Kellogg's 31% Protein Old Process (Expeller)

 Linseed Meal
- 85. /KENTUCKY VALLEY FARMS, Martinsville, New Jersey
 Kentucky Valley's Lightweight Fertilizer for Turf
 Kentucky Valley's Weed & Feed

86. /N.S. KOOS & SON CO., 4500 13th Court, Kenosha, Wisconsin

Holiday Flower & Garden Fertilizer 5-10-5

Holiday New 3-Way Lawn Treat 10-6-4

Holiday Weed & Feed 20-10-5

Lawn Aide Lawn Fertilizer 20-10-5

87. LAWN-TEX, INC., 2005 East End Ave., Box 101, Chicago Heights, Illinois
Organi-Green

88. LEBANON CHEMICAL CORP., P.O. Box 693, Lebanon, Pa.

Lebanon Azalea-Evergreen Food Lebanon Bone Meal Lebanon Hi Organic Lebanon Plant Food Lebanon Rose Food Lebanon Turf Organic Lebanon Uniform Pennsylvania Dutch Plant Food

89. LEWIS BROTHERS, INC., 810 Silas Deane Highway, Wethersfield, Connecticut

(Registered by Miller Chemical & Fertilizer Corp., 3006 W. Cold Spring Lane, Baltimore 15, Maryland)

Lewis Brothers, Inc. Country Club Lawn Food

90. /THE LIBERTY FERTILIZER GROUP, Windsorville, Conn.

Liberty Lawn Food 10-6-4 Liberty Plant Food 5-10-5

91. LOFTS PEDIGREED SEED, INC., Chimney Rock Road, Bound Brook, New Jersey

Atlantic's Lightweight Fertilizer Atlantic's Weed & Feed First Aid Brand Grass Seed & Fertilizer Mixture Loft's for Turf Loft's Lightweight Fertilizer Loft's Weed & Feed

92. LUZERNE FERTILIZER CO., Nescopeck, Pennsylvania
Luzerne 5-10-5

Luzerne 10-6-4

93. McARDLE'S SEED CO., 388 Greenwich Ave., Greenwich,
Connecticut

McArdle's 10-6-4 McArdle's Turf Food

94. /McNAIR FARMS, Laurinburg, North Carolina
McNair's Organure Dehydrated Cow Manure

95. /R.H. MACY & CO., INC., 1314 Broadway, New York, N.Y. Supre-Macy Turf Food 20-10-5

96. THE MAGOVERN CO., Lawn Acre Rd., Windsor Locks, Connecticut

(Registered by The Mamlon Co., P.O.Box 3046, New Haven, Connecticut)

Mag-Gro Fairway Fertilizer

97. THE MAMLON CO., P.O. Box 3046, New Haven, Conn.

Fer-Mel Fairway Turf Food

Fer-Mel General Purpose Plant Food

Fer-Mel P.G. Turf Food

Fer-Mel Premium Lawn Food

Fer-Mel 50 Supreme Lawn Food

Fer-Mel Water Soluble Turf & Tree Food

98. /MISSISSIPPI COTTONSEED PRODUCTS CO., Greenville, Mississippi

41% Protein Cottonseed Meal

99. /MR.TURF'S, Box 108, Kenosha, Wisconsin

Mr. Turf's Flower & Garden Fertilizer

Mr. Turf's Lawn Fertilizer

Mr. Turf's Weed & Feed

100. MONSANTO CO., 800 N. Lindbergh, St. Louis, Mo. 63166

Ammonium Nitrate Phosphatic Fertilizer Solution Urea

101. THE NATURAL DEVELOPMENT CO., Box 215, Bain-bridge, Pennsylvania 17502

Fertrell Blue Label

Fertrell Gold Label

Fertrell Super

Fertrell Super "N"

Fertrell 2-2-2

Longhorn Brand Cattle Manure

Ramshorn Brand Sheep Manure

102. *NEW PLANT LIFE-Div. of Chas. O. Finley & Co., Inc., 310 So. Mich. Ave., Chicago 4, Illinois

New Plant Life 2-1-2

103. OLD DEERFIELD FERTILIZER CO., So. Deerfield, Mass.

(Registered by The Hubbard-Hall Chemical Co., 28 Benedict St., Waterbury, Connecticut)

Deerfield Lawn Food 10-6-4

Deerfield Lightweight Lawn Food 20-10-5

Deerfield Plant Food 5-10-5

104. OLD FOX AGRICULTURAL SALES, INC., 66 Valley St., East Providence, Rhode Island

> Old Fox 0-15-30 /Old Fox 0-20-0 Old Fox 0-20-20 Old Fox 4-16-20 /Old Fox 5-10-10 Old Fox 5-10-10 with 1.2 Mg Old Fox 6-3-6 Old Fox 6-3-6 with 1.2 Mg Old Fox 6-8-8 with 1.2 Mg Old Fox 6-10-10 with 1.2 Mg Old Fox 7-7-7 Old Fox 8-10-10 with 1.2 Mg Old Fox 8-16-16 401d Fox 10-6-4 Old Fox 10-10-10 Old Fox 15-10-10 #Old Fox 15-15-15 /Old Fox 10-20-20 Acid Soil 6-10-6 Bone Meal ∠Estate Green Fertilizer 10-6-4 Garden Food 5-10-5 Green Leaf 8-6-4 /Muriate of Potash No Pest Turf Food 8-6-2 Rose Food 7-8-6 /Sulphate of Ammonia /Tree Food 10-8-7 Turf Food 8-6-2 Turf Food with Ureaform 10-6-4

105. /OLIN MATHIESON CHEMICAL CORP., P.O. Box 991, Little Rock, Arkansas

> Ammo-Phos Fertilizer with Potash 13-13-13 Mathieson 5-10-5 Pelleted Fertilizer Olin 5-10-10 Fertilizer Olin Urea Fertilizer Pelletized 45%

106. ORGANIC COMPOST CORP. OF PENNSYLVANIA, P.O. Box 70, Oxford, Pennsylvania

Fertie Composted Cow Manure Fertie Composted Sheep Manure Fertilife Composted Manure Gardener's Composted Cow Manure Gardener's Composted Poultry Manure Gardener's Composted Sheep Manure Gardenure Composted Cow Manure Manure's Best Composted Cow Manure 107. ORGANIC GROWTH PRODUCTS CO., P.O. Box 446. Farmingdale, New Jersey

Miracle Orga-Vite Lawn Fertilizer

108. LEE PATTEN SEED CO., Purcell Ct., Moonachie, N.J.

Patco's Brand Allganic 4-6-2

Patco's Brand Chek 10-6-4 with Diphenatrile

Patco's Brand Combo 10-6-4 with 2, 4-D plus 2, 4, 5T

Patco's Brand Evergreen Food 10-7-5

Patco's Brand Featherweight 20-10-5

Patco's Brand Lawn Food 9-8-3

Patco's Brand Rose Food 6-9-5

Patco's Brand Shrub Food 7-8-7

Patco's Brand Sod-Maker 10-6-4

- 109. PAX COMPANY, 580 W. 13th South, Salt Lake City, Utah Pax Crabgrass Control
- 110. /PENNSYLVANIA DUTCH FERTILIZER CO., Lebanon, Pa. Turf Master Emerald 20-10-5
- 111. PERK-UP PRODUCTS CO., South Deerfield, Mass.

(Registered by The Hubbard-Hall Chemical Co., 28 Benedict St., Waterbury, Connecticut)

Perk-Up Lawn Food 10-6-4

Perk-Up Lawn Food 20-10-5

Perk-Up Lawn Food with Crabgrass Preventer

Perk-Up Plant Food

Perk-Up Rose Food

Perk-Up Special Lawn Food 10-6-4 (25% of Nit. is Org.)

ROBERT B. PETERS CO., INC., 2833 Pennsylvania St., 112. Allentown, Pennsylvania

Peters 20-5-30

Peters Carnation Special 25-5-20

Peters Easter Lily Special 16-4-12

Peters Fritted Potash

Peters General Purpose 20-20-20

Peters Geranium Special 15-15-15

Peters Maryland Special 25-10-10

Peters Plant Starter 9-45-15

Peters Pot Mum Special 15-10-30

113. *PLANTABBS CORP., Timonium, Maryland

Hy-Gro Garden & Lawn Food Plantabbs Liquid Plant Food

/PLATT'S GARDEN CENTER, 875 W. Main St., Branford, 114. Connecticut

Platt's Hi Organic Lawn Fertilizer 10-5-5

- 115. /FRANK POLICASTRO & SONS, INC., Glenbrook, Conn.
 Policastro's Blue Chip Turf & Tree Food 10-5-5
- 116. PRO HARDWARE, INC., P.O. Box 108, Kenosha, Wisc.

 (Registered by N.S. Koos & Son Co., Kenosha, Wisc.)

 Proven Brand Lawn Fertilizer

 Proven Brand Weed & Feed
- 117. /PROFESSIONAL TURF PRODUCTS CO., 3 Main Street, Mount Kisco, New York
 Professional Tree & Shrub Food 7-7-7 30% Organic
- 118. RA-PID-GRO CORP., 88 Ossian St., Dansville, New York Ra-Pid-Gro
- 119. RENZULLI BROS. GARDEN CENTER, 297 Westport Ave.,
 Norwalk, Connecticut

 (Registered by Miller Chemical & Fertilizer Corp.
 3006 W. Cold Spring Lane, Baltimore 15, Maryland)
 Renzulli Bros. 10-6-4 Lawn Food
- 120. ROSS DANIELS, INC., 115 S. W. 8th St., Des Moines, Iowa
 Ross Plant Food Cartridge 25-10-10 Beautiful Trees
 Ross Plant Food Cartridge 10-20-20 Evergreen-Acid
 Ross Plant Food Cartridge 5-35-10 Iron Deficiency
 Ross Plant Food Cartridge 15-25-10 Prize Rose
 Ross Plant Food Cartridge 10-20-10 Regular Diet
 Ross Plant Food Cartridge 9-46-15 Starter
- 121. RUSSELL-JOHNSON CHEMICAL CO., INC., P.O. Box 241, Wilmington, Massachusetts

 Golden Rain
- 122. S & D PRODUCTS, INC., 216 South Minnesota, Prairie du Chien, Wisconsin Eesy Grow 16-8-16
- 123. O. M. SCOTT & SONS CO., Marysville, Ohio

 Bonus
 Dawn
 Halts Plus
 ProTurf Fertilizer
 ProTurf Fertilizer with Dicot Weed Control
 ProTurf Nitrogen Fertilizer
 Turf Builder
 Turf Builder Plus 1
 Turf Builder Plus 2
 Turf Builder Plus 4

124. SEARS, ROEBUCK & CO., 925 S. Homan Ave, Dept. 671, Chicago, Illinois 60607

Sears All Organic Lawn Food Sears Azalea-Camellia Food

Sears Bone Meal

Sears Bone Meal Sears Bulb Food

Sears Composted Cow Manure

Sears Composted Sheep Manure

Sears Crabgrass Plant Killer in Organic Lawn Food

Sears Economy Fertilizer

Sears Evergreen Food

Sears Green Karpet Lawn Food

Sears Hi-Organic

Sears Lawn Quick Green

Sears Plant Food

Sears Pre-Emerge Crab Grass Killer & Fertilizer with Grub Control

Sears Rose Food

Sears Sulfate of Ammonia

Sears Superfine Lawn Food

Sears Weed Killer in Organic Lawn Food

- 125. SEWERAGE COMMISSION OF THE CITY OF MILWAUKEE, P.O. Box 2079, Milwaukee 1, Wisconsin Milorganite
- 126. THE SHERWIN-WILLIAMS CO., 101 Prospect Ave.,
 N. W., Cleveland, Ohio
 Sherwin-Williams 32% Linseed Meal (Solvent Extracted)
 Sherwin-Williams 34% Linseed Meal (Solvent Extracted)
- 127. SOUTHERN COTTON OIL, Division, Hunt Foods & Industries, Inc., Box 646, Macon, Georgia 31202

 Sco-Co Brand 41% Protein Cottonseed Meal
- 128. /SOUTHWEST POTASH CORP., New York, New York
 High K Nitrate of Potash
- 129. *THE SPECIALTY MFG. CO., St. Paul 14, Minnesota Specialty All Purpose 10-20-10 Food Pellets
- 130. *SPECIALTY PRODUCTS CO., Latty, Ohio Capri Bonemeal
- 131. SPECIALTY PRODUCTS, Division, Davison Chemical Co., 101 N. Charles St., Baltimore 3, Maryland

 Magamp

 Magamp with K

132. STERN'S GARDEN PRODUCTS, INC., 404 William St., Geneva, New York

> Miracid Miracle-Gro Miracle-Gro for Roses 14-28-18 Miracle-Gro for Roses 18-24-16

133. STIM-U-PLANT LABORATORIES, INC., 2077 Parkwood St., Columbus, Ohio

> Stim-U-Plant 5-8-7 Stim-U-Plant 11-12-15

134. STOKLE, INC., Kennett Square, Pennsylvania

> (Registered by Organic Compost Corp. of Pa., P.O. Box 70, Oxford, Pennsylvania)

Farmyard Gold Composted Cow Manure Farmyard Gold Composted Sheep Manure

SWIFT & CO., AgriChem Div., Box 1404, New Haven, Ct. 135.

> All Purpose Vigoro Golden Vigoro Golden Vigoro with End-O-Pest Golden Vigoro Triple Acting Crabgrass Control Instant Vigoro Liquid Vigoro for African Violets Liquid Vigoro for House Plants Par Ex Pink Vigoro Swift's Bone Meal 1-23 Swift's Bone Meal 2, 47-23

Bigoro Azalea & Camellia Food

Vigoro Evergreen Food with 0.15% Iron

Vigoro Fish Emulsion

Vigoro Lawn Weeder & Feeder

Vigoro Rose Food

Vigoro Turf Food for Professionals

Vitogro Azalea & Camellia Food

Vitogro Evergreen Food with 0.15% Iron

Vitogro Garden Grower

Vitogro for Grass

Vitogro Lawn Pest Control plus Plant Food

Vitogro Lawn Weeder & Feeder

Vitogro Professional Lawn & Turf Grower

Vitogro Rose Food

Vitogro Triple Acting Crabgrass Control

/Swift's Cottonseed Meal 41% Protein-Prime Quality

136. SWISS FARMS, INC., Box J, Philmont, New York

> African Violet Food Fish Emulsion Fertilizer Plantdrops (Liquid) Plant Food

- 136. SWISS FARMS, INC., Box J, Philmont, New York-Cont.

 Plant Food (Liquid)

 Rose Food

 *Swiss Farms Cow Manure 2-1-1
- 137. /THOMASON RANCH, Division, Thomason Industries, Inc., Fayetteville, North Carolina

 Our Ranch Dehydrated Cow Manure
- 138. /UNIVERSAL CHEMICAL CO., INC., West Lynn, Mass. Electra Plant Food 5-10-3
- 139. UNITED STATES STELL CORP., 525 William Penn Place, Pittsburgh, Pennsylvania
 USS Ammonium Sulfate
- 141. /VALU-GRO CORP., Box 21, Princeton, New Jersey
 Union 5-10-5 Fertilizer
 Valu-Gro 5-10-5
 Valu-Gro 10-6-4
- 142. VAUGHAN'S SEED COMPANY, 5300 Katrine Ave.,
 Downers Grove, Illinois

 Four Way
 Feeder Weeder
 One Shot
 Turf Food
- 143. WALKER-GORDON LABORATORY CO., Plainsboro, N.J.

 Bovert
 Bovung
- 144. WARREN'S TURF NURSERY, 8400 W. 111th St., Palos Park, Illinois
 Warren's Lawn Food
- 145. WESTERN AUTO SUPPLY CO., Kansas City, Missouri

 (Registered by Federal Chemical Co., 646 Starks
 Bldg., Louisville, Kentucky 40202)

 Western Auto Revelation Lawn Fertilizer
 Western Auto Revelation Weed & Feed with 2, 4-D

146. GARFIELD WILLIAMSON, INC., 1072 West Side Ave., Jersey City 6, New Jersey

Plantspur

Wonderlawn All-In-One (100 Organic Nitrogen)

Wonderlawn Lawn Food

Wilson's Special Lawn Food

Wonderlawn Turf Culture Lawn Food

147. ANDREW WILSON, INC., Baltusrol Way, Springfield, N.J. Wilson's Eureka Plant Food

148. S.D. WOODRUFF & SONS OF WETHERSFIELD, INC., 304 Main St., Wethersfield, Connecticut

Woodruff's Tuf Turf Turf Food 10-6-4 Woodruff's Tuf Turf Turf Food 25-10-5

GRADES OF FERTILIZER USED IN CONNECTICUT

The Connecticut fertilizer law does not provide for compulsory limitation of the grades that may be sold in this State. Nevertheless (until recently, at least) there has been general agreement that a small number of grades can take care of all of the needs of agriculture, and that standardization on a few grades will promote economy of manufacture, with the consequent possibility of lower prices. In contrast to this, the last few years have seen the rise in some States of so-called bulk blending plants which mix fertilizer ingredients to the order of individual farmers according to proportions determined by soil analyses. Whether this type of custom mixing will spread in Connecticut with its smaller farms remains to be seen.

To promote grade standardization the New England agronomists have from time to time compiled lists of recommended fertilizer rations and minimum grades. The last such list, which was drawn up at a meeting in Burlington, Vermont on June 19, 1961, was as follows:

Ratio	Most Common Grade
0-1-1	0-20-20
0-1-2	0-15-30
0-1-3	0-10-30
0-1-4	0-10-40
0-3-1	0-30-10
1-1-1	10-10-10
1-2-2	5-10-10
1-4-2	3-12- 6
2-1-1	10- 5- 5
2-1-2	6- 3- 6
2-3-3	8-12-12
3-2-2	15-10-10
3-4-4	6- 8- 8
4-2-3	16- 8-12
4-3-1	8- 6- 2

Seventy-six per cent of the mixed fertilizers sold in this State during the 1964-1965 season were of the recommended ratios in grades whose plant food content equalled or exceeded the specified "most common grades". Three other grades, each of which sold over a thousand tons (5-10-5, 8-10-10 and 23-7-7), accounted for another 11 per cent. The numerous additional grades accounted for only 14 per cent of the total tonnage. This tonnage was less than that for the 1964 season by 6,249.

During the past season the Station agent collected samples of all registered brands that could be found on the market. The total number of official samples was 702.

The following tabulation lists the number of samples analyzed (both official and unofficial) of each class of fertilizer, as well as the tonnage sold during the period between July 1, 1964 and June 30, 1965:

TONNAGES OF FERTILIZER MATERIALS AND MIXED FERTILIZERS PURCHASED DURING THE PERIOD OF JULY 1, 1964 - JUNE 30, 1965

		No. of Samples	Tonr	age
I.	Containing chiefly nitrogen:			
	Nitrate of ammonia	5	363	
	Nitrate of soda	3	265	
	Sulphate of ammonia	5	18	
	Calcium Nitrate	1 2	217	
	Cyanamid Urea	10	217 467	
	Nitrogen solutions	-	746	
	Castor pomace	3	393	
	Cottonseed meal	46	2, 956	
	Linseed meal	9	281	
	Soybean meal	3	355	
	Dried blood	2	3	
	Horn and hoof meal	1	8	
	Other materials	5	142	6,214
II.	Containing chiefly phosphoric acid:			-,
	Superphosphate 18%	-	2 010	
	20% 46%	10 10	2,810 359	
	Dicalcium phosphate	4	339	
	Phosphate rock	1	65	
	Precipitated bone	2	114	
				3,350
III.	Containing chiefly potash:	2		
	Carbonate of potash Muriate of potash	2 6	227	
	Sulphate of potash	3	3	
	Sulphate of potash-magnesia	i i	_	
	Cotton hull ashes	6	188	
IV.	Containing nitrogen and phosphoric	acid:		418
1	Bone meal	20	290	
	Diammonium phosphate	2	14	
	Dry ground fish	7	10	
	Other materials	-	1,090	
v.	Containing nitrogen and potash:			1,404
•	Nitrate of potash	8	63	
	Nitrate of potash-soda	1	17	
3.7.7	Mine I familia and			80
VI.	Mixed fertilizers: Commercial mixtures	563	52,209	
	Special and home mixtures	47	9, 188	
	special and nome inmode			67,397
VII.	Miscellaneous:	,		
	Aluminum sulphate	1	9	
	Borax Fritted iron preparations	1	13	
	Sheep and cattle manure	34	1,821	
	Limestone and similar materials			
	Other miscellaneous materials	17		
	Check meals and fertilizers	26		
				1,845
	Totals	879		74, 708

MIXED FERTILIZER DISTRIBUTION

Grades	s appr	oved fo	r Connecticut

Grade	Tons	Grade	Tons
0-10-30	1,576	10-20-20	1,005
0-15-30	1,085	12-12-12	3
0-20-20	286	13-13-13	10
0-25-25	134	14-14-14	1
5-10-10	4,738	15-10-10	7, 098
6- 3- 6 6- 8- 8	2,100	15-15-15 16- 8- 8	1,587 781
6-12-12	3,601 63	16- 8-12	144
8- 6- 2	699	16-16-16	20
8-12-12	101	18-18-18	5
8-16-16	1,046	20-10-10	120
10- 5- 5	1,037	20-20-20	21
10-10-10	12,075	24-12-12	40
10-15-15	160		
		Total	39,536
		Grades	
	(50 tons	or more)	
3-1-1	61	7- 7- 7	599
3 - 2 - 1	85	8- 6- 4	928
4-6-4	52	8-10-10	1,690
4-10- 4	95	9- 5- 3	111
4-16-20	180	12- 4- 8 12- 5- 7	127
5- 4- 0 5- 8- 7	452 196	20- 5- 5	535 148
5-10- 5	2,019	20-10- 5	492
6- 4- 7	54	20-12- 8	268
6- 8- 6	482	22- 8- 4	171
6-10- 4	348	23- 7- 7	1,878
6-10-10	555	25-12-10	278
6-12- 4	181	m - 4 - 1	11 005
		Total	11,985
	(Less th	an 50 tons)	
2-1-2	15	10- 8- 8	22
4- 4- 4	23	10-20-10	49
4- 8- 5	23	11- 4- 6	15
4-10- 0	30	12- 4- 4 16- 8- 4	27 12
5- 4- 4 5- 5- 0	18 10	17- 4- 4	11
6- 6- 8	23	18- 6- 9	32
6- 7- 4	12	20-10- 8	21
7-10- 5	39	23-19-17	22
8- 8- 8	23	24- 6- 6	17
8-12- 6	13	25-10- 5	46
8-16- 8	15	Other grades	160
10- 8- 2	10	Total	688
		Grand total	52,209

COMPLIANCE WITH GUARANTIES

The table in Circular 228 was designed to indicate at a quick glance the relative performances of the various manufacturers by two bases of measurement: (1) The total numbers of deficiencies found in their samples; and (2), the extent (expressed as percentage) to which their products offered more or less fertilizer value than was claimed, when allowance was made for the offsetting of an excess of one major element by a deficiency in another. This table gives no actual analytical figures, and does not indicate the specific brands and grades in which the summarized deficiencies occurred. Such a table probably offers a means of comparison that is both simpler and fairer than the summaries and table-underlinings of previous years. It is however wholly derivative, and does not supply the data for checking its conclusions. Partly to furnish these missing data, and partly just to supply information on the composition of specific brands, analyses of the actual official samples with their indicated deficiencies are given in Tables 1 to 6 of the present bulletin. Comments on these tables follow:

I. Materials Chiefly Valuable for Nitrogen

Analyses of 71 official samples of nitrogenous materials are given in Table 1. Fifty-nine of these met their guaranties and 12 were deficient. The substandard samples included 9 of cottonseed meal, two of ammonium nitrate and one of "Cascio's Organite."

II. Materials Chiefly Valuable for Phosphoric Acid

Analyses of eight official samples of 20 per cent superphosphate and five of the 46 per cent grade, four of dicalcium phosphate, and one of phosphate rock, are given in Table 2. Of the total of 18 samples, 14 met their guaranties; three 46 per cent, and one 20 per cent, superphosphates were deficient.

III. Materials Chiefly Valuable for Potash

Six samples of muriate of potash, two of sulphate of potash, and one each of carbonate of potash, sulphate of potash-magnesia, fritted potash and cotton hull ashes, were analyzed with results as shown in Table 3. Nine samples were passed; one sample each of carbonate of potash, muriate of potash and sulphate of potash was deficient.

IV. Materials Supplying Nitrogen and Phosphoric Acid

This group consists chiefly of dry ground fish and bone meal. For natural products such as these, guaranties of total instead of "available" phosphoric acidare permissible. Eighteen official samples of bone meal, four of dry ground fish and two of diammonium phosphate, were analyzed in 1965 with results as shown in Table 4. All samples were passed with the exception of one of diammonium phosphate that was low in nitrogen.

V. Materials Supplying Nitrogen and Potash

Four samples of nitrate of potash and one of mixed potassium and sodium nitrates were analyzed; all of the nitrate of potash samples met their guaranties, while the potassium-sodium nitrate mixture was deficient in potash. Analyses are given in Table 3.

VI. Mixed Fertilizers

Commercial Mixtures

Analyses of 538 official samples of mixed fertilizers are given in Table 5. This table includes both samples taken from larger bags and small-package material. The samples have been grouped so as to place together all samples of each grade ratio.

Results of these analyses are summarized as follows:

Total number of samples	538
Samples deficient in:	
one item 165	
two items 40	205
Percentage of samples meeting all guaranties	62
Total guaranties made ¹	1,592
Guaranties not met:	
nitrogen 90	
phosphoric acid 130	
potash 16	236
Percentage of guaranties met	85

Thirty-two samples guaranteed magnesium (mostly 1.2 per cent) in addition to the major components; all were passed. Eighteen samples declared between 0.01 and 0.50 per cent of iron: there was no actual deficiency, but the proportion of iron present was usually many times the guaranty. Seventeen samples claimed between 0.00 and 0.45 per cent (mostly 0.02 per cent) of boron; all guaranties were met. One sample listed 2.75 per cent of sulphur. In addition, there were multi-minor-element fractional percentage guaranties as follows (one sample each): boron, copper, iron and zinc; boron, iron and zinc; boron and iron; iron and sulphur; iron and zinc. All of these samples were passed.

VII. Miscellaneous

Sheep and Cattle Manures

Manures must bear guaranties of nitrogen, either total or "available" phosphoric acid, and potash. Of the 32 official samples analyzed during the 1964-1965 season, 27 met all guaranties, two each were low in nitrogen and phosphoric acid respectively, and one was deficient in both these components. Analyses are given in Table 6.

¹ Five hundred and sixteen samples with three guaranties and 22 with two guaranties (minor element guaranties not included).

Limestone and Similar Materials

The Connecticut Fertilizer Law specifically excludes "marl and lime" from its jurisdiction, but the Station occasionally analyzes samples of limestone, hydrated lime and gypsum submitted by farmers or state or Federal agencies. Twelve such samples received in 1965 are reported in Table 7.

Other Miscellaneous Materials

Analyses of 17 unofficial samples of miscellaneous materials of possible or suspected fertilizer value are given in Table 8. This table also includes one official sample each of aluminum sulphate and borax.

Recent field experiments conducted by the University of Connecticut have indicated that the proportion of the available phosphoric acid in potato fertilizers that is present in water-soluble form is a significant factor in determining the yield of potatoes on land to which such fertilizers have been applied. At the request of Dr. Arthur Hawkins of the University, all of this year's official samples of the 5-10-10, 6-8-8, 8-12-12 and 10-10-10 grades were analyzed for water-soluble phosphoric acid in addition to running the usual total and citrate-insoluble determinations. The results so obtained are reproduced in Table 9 for the inspection of potato growers and others interested in this breakdown. (It should be noted that all samples in this table are also listed in Table 5.)

The usual collaboration with check analyses programs was continued. Samples analyzed included 16 vegetable meal samples received from the American Oil Chemists' Society, and 10 check fertilizers supplied by the National Plant Food Institute.

TABLE 1.

ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN

Station No.	Manufacturer or jobber and dealer		Per cent nitrogen	
01	NIEDAEROE ANGONIA	F	<u> </u>	
	NITRATE OF AMMONIA			
49841	Aeroprills. American Cyanamid Co., Princeton, N.J. Sampled at Conn. Reformatory, Cheshire.	33.52	33.50	
5242	Aeroprills. American Cyanamid Co., Princeton, N.J. Sampled at New			
	Haven Rendering Co., West Haven.	33.12	33.50	
5471	Agway 33 1/2 N. Agway, Inc., Syra-			
	cuse, N.Y. Sampled at Agway, Inc., Buckland.	32.16	33.50	
4809	Arcadian Gold-AN Pelleted. Allied Chemical Corp., Nitrogen Div., Hopewell, Va. Sampled at Agway, Inc., Willimantic.	33, 80	33,50	
		33.00	33.30	
5022	Arcadian Gold-AN Pelleted. Allied Chemical Corp., Nitrogen Div., Hopewell, Va. Sampled at Southbury Training School, Southbury.	33.66	33.50	
	NITRATE OF SODA			
4742²	Chilean Champion Brand. Chilean Nitrate Sales Corp., New York, N.Y. Sampled at The Hartman Tobacco			
	Co., Bloomfield.	16.04	16.00	
4802 ³	Chilean Champion Brand. Chilean Nitrate Sales Corp., New York, N.Y. Sampled at American Sumatra To-			
	bacco Corp., Bloomfield.	16.04	16.00	
5025 ¹	⁴ Chilean Champion Brand. Chilean Nitrate Sales Corp., New York, N.Y.			
	Sampled at Southbury Training School, Southbury.	16.08	16.08	

..... Indicates deficiencies.

1 State purchase.

² Sodium: Guaranteed, 26.00%; found, 26.48%.

³ Sodium: Guaranteed, 26.00%; found, 26.38%.

⁴ Sodium: Guaranteed, 26.00%; found, 26.12%.

TABLE 1.

Station No.	Manufacturer or jobber and dealer	Per o	
<i>σ</i>		F	G
5760	SULPHATE OF AMMONIA Consolidated Rendering Co., Boston, Mass. Sampled at Springfield Rendering Co., Chicopee, Mass.	21.04	20.50
5124	Eastern States. Agway, Inc., Syra- cuse, N.Y. Sampled at Agway, Inc., Putnam.	20.80	20.50
58 7 5*	A.H.Hoffman, Inc., Landisville, Pa. Sampled at Walter W. Simmons & Son, Inc., Granby.	20.80	20.00
5942/	The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hubbard-Hall Chemical Co., Portland.	20.90	20.00
5221/	Old Fox Agricultural Sales, Inc. East Providence, R.I. Sampled at Old Fox Agricultural Sales, Inc., Hazardville.	21.42	• • • •
	CYANAMID		
5779	Aero Granular. American Cyanamid Co., Princeton, N.J. Sampled at Hubbard-Hall Chemical Co., Wind- sorville.	20.96	20.50
5472	Aero Special Grade. American Cyana- mid Co., Princeton, N.J. Sampled at Agway, Inc., Buckland.	22.00	21.00
	UREA		
5299 ¹	Aero Urea Coated Prills. American Cyanamid Co., Princeton, N.J. Sam- pled at State Highway Dept., Portland.	45.44	45.00
5552	Arcadian Urea 45 Fertilizer (Pelleted). Allied Chemical Corp., Nitrogen Div., Hopewell, Va. Sampled at Agway, Inc., Torrington.	45.76	45.00
* Sma	11 package sample. / Unregiste		

¹ State purchase.

TABLE 1.

Station No.	Manufacturer or jobber and dealer	Per o	
· Ω		F	G
5241	DuPont Nu Green Urea Fertilizer. E. I. Du Pont de Nemours & Co., Wilmington, Del. Sampled at New Haven Rendering Co., West Haven.	46.08.	45.00
5297 ¹	Du Pont Nu Green Urea Fertilizer. E. I. Du Pont de Nemours & Co., Wilmington, Del. Sampled at State Highway Dept., Portland.	46.20	45.00
5661	Du Pont Uramite Ureaform Fertilizer. E.I. Du Pont de Nemours & Co., Wilmington, Del. Sampled at Hubbard-Hall Chemical Co., Portland.	38.00	38.00
5665	Du Pont Uramite M Ureaform Fertilizer. E.I. Du Pont de Nemours & Co., Wilmington, Del. Sampled at The Mamlon Co., Orange.	38.56	38.00
5696	Grace Urea Prills. W.R.Grace & Co., Nitrogen Products Div., Memphis, Tenn. Sampled at Checkerboard Feed Store, New Milford.	45.36	45.00
5859/	Olin Urea Fertilizer (Pelleted). Olin Mathieson Chem. Corp., Agr. Div., Little Rock, Ark., Sampled at Old Fox Agricultural Sales, Hazardville.	45.04	45.00
	CASTOR POMACE		
4751	Baker's Castor Pomace. Baker Castor Oil Ço., Bayonne, N.J. Sampled at American Sumatra Tobacco Corp., Bloomfield.	5.92	••••
4752	Baker's Castor Pomace. Baker Castor Oil Co., Bayonne, N.J. Sampled at American Sumatra Tobacco Corp., Bloomfield.	5. 24	••••
4805	Baker's Castor Pomace. Baker Castor Oil Co., Bayonne, N.J. Sampled American Sumatra Tobacco Corp., Bloomfield.	5.68	

¹ State purchase.

TABLE 1.

Station No.	Manufacturer or jobber and dealer	Per nitro	
· Ω		F	G
	COTTONSEED MEAL		
4720 <i>/</i>	41% Protein. Cadwell & Jones, Inc., Hartford, Conn. Sampled at General Cigar Co., Inc., Simsbury.	7.00	6.56
4724/	41% Protein. Cadwell & Jones, Inc., Hartford, Conn. Sampled at General Cigar Co., Inc., Simsbury.	6.76	6.56
4726/	41% Protein. Cadwell & Jones, Inc., Hartford, Conn. Sampled at General Cigar Co., Inc., Simsbury.	6.84	6.56
4727/	41% Protein. Cadwell & Jones, Inc., Hartford, Conn. Sampled at General Cigar Co., Inc., Simsbury.	6.80	6.56
4745/	41% Protein. Cadwell & Jones, Inc., Hartford, Conn. Sampled at Hart- man Tobacco Co., Bloomfield.	6.76	6.56
4747/	41% Protein. Cadwell & Jones, Inc., Hartford, Conn. Sampled at Hart- man Tobacco Co., Bloomfield.	6.88	6.56
4748/	41% Protein. Cadwell & Jones, Inc., Hartford, Conn. Sampled at Hart- man Tobacco Co., Bloomfield.	6.56	6.56
4749/	41% Protein. Cadwell & Jones, Inc., Hartford, Conn. Sampled at Hart- man Tobacco Co., Bloomfield.	6.56	6.56
4750/	41% Protein. Cadwell & Jones, Inc., Hartford, Conn. Sampled at Hart- man Tobacco Co., Bloomfield.	6.52	6.56
4803 <i>/</i>	41% Protein. Cadwell & Jones, Inc., Hartford, Conn. Sampled at American Sumatra Tobacco Corp., Bloomfield.	6.56	6.56
4804/	41% Protein. Cadwell & Jones, Inc., Hartford, Conn. Sampled at American Sumatra Tobacco Corp., Bloomfield.	6.72	6.56

[/] Unregistered.

6.56

6.16

TABLE 1.

ANALYSES OF MATERIALS SUPPLYING CHIEFLY NITROGEN Station Per cent Manufacturer or jobber and dealer nitrogen 4714 Cocke-Sure 41%. Cocke & Co., Atlanta, Ga. Sampled at Hatheway-Steane Corp., West Suffield. 6.56 6.56 Cocke-Sure 41%. Cocke & Co., Atlan-4715 ta, Ga. Sampled at Hatheway-Steane Corp., West Suffield. 6.56 6.56 Cocke-Sure 41%. Cocke & Co., Atlan-4716 ta, Ga. Sampled at Hatheway-Steane 6.66 6.56 Corp., West Suffield. 4970/ Consolidated Rendering Co., Boston, Mass. Sampled at Comstock Ferre & 6.08 6.00 Co., Wethersfield. 5490/ Solvent Extracted 41%. John W. Eshelman & Sons, Lancaster, Penna. Sam-6.56 pled at Belmont Feed Co., Cos Cob. 5.80 5386 G & O Prime. Goulard & Olena, Inc., Skillman, N.J. Sampled at The Garden Center, Inc., W. Hartford. 6.44 6.00 4972⁵ Faesy & Besthoff, Inc., Edgewater, N.J. Sampled at Comstock Ferre & Co., Wethersfield. 6.72 6.00 The Hubbard-Hall Chemical Co., 5721 Waterbury, Conn. Sampled at The Gardener's Center, Inc., Darien. 6.48 6.00 4703 41% Protein. Mississippi Cottonseed Products Co., Greenville, Miss. Sampled at Hatheway-Steane Corp., 6.56 West Suffield. 6.24 41% Protein. Mississippi Cottonseed 4710 Products Co., Greenville, Miss.

..... Indicates deficiencies. / Unregistered.

Sampled at Hatheway-Steane Corp.,

West Suffield.

^{5 &}quot;Available" phosphoric acid:Guaranteed, 1.00%; found, 2.83%. Potash: Guaranteed, 1.00%; found, 2.17%.

TABLE 1.

Station No.	Manufacturer or jobber and dealer	Per nitro	
S		F	G
4711	41% Protein. Mississippi Cottonseed Products Co., Greenville, Miss. Sampled at Hatheway-Steane Corp., West Suffield.	6.24	6.56
4712	41% Protein. Mississippi Cottonseed Products Co., Greenville, Miss. Sampled at Hatheway-Steane Corp., West Suffield.	6.44	6.56
4708	Sco-Co Brand 41%. Southern Cotton Oil Div., Hunt Foods & Industries, Inc., Rocky Mount, N. C. Sampled at Hatheway & Steane Corp., West Suffield.	5.48	6.56
4709	Sco-Co Brand 41%. Southern Cotton Oil Div., Hunt Foods & Industries, Inc., Rocky Mount, N.C. Sampled at Hathe- way-Steane Corp., West Suffield.	6.12	6.56
5611	Sco-Co Brand 41%. Southern Cotton Oil Div., Hunt Foods & Industries, Inc., Rocky Mount, N.C. Sampled at A.N. Pierson, Inc., Cromwell.	6.10	6.56
5477/	41% Prime Quality. Swift & Co., Chicago, Ill. Sampled at McArdle's Seed Co., Greenwich.	6.16	6.56
	LINSEED OIL MEAL		
4701 /	Maple Leaf 34% Protein Expeller. Canada Linseed Oil Mills Ltd., Montreal, Canada. Sampled at Hatheway-Steane Corp., West Suffield.	5.96	5.44
4705 /	Mample Leaf 34% Protein Expeller. Canada Linseed Oil Mills Ltd., Mon- treal, Canada. Sampled at Hatheway Steane Corp., West Suffield.	5.56	5.44
4707/	Maple Leaf 34% Protein Expeller. Canada Linseed Oil Mills Ltd., Montreal, Canada. Sampled at Hatheway-Steane Corp., West Suffield.	5.60	5.44

TABLE 1.

Station No,	Manufacturer or jobber and dealer	Per o	
S		F	G
4733/	32%. Consolidated Storage, Inc., Gunterville, Ala. Sampled at General Cigar Co., Inc., Granby.	5.12	5.12
4730	32% (Solvent Extracted). Sherwin-Williams Co., Cleveland, Ohio. Sampled at General Cigar Co., Inc., Simsbury.	5,32	5.30
47196	32% (Solvent Extracted). Sherwin-Williams Co., Cleveland, Ohio. Sampled at General Cigar Co., Inc., Simsbury.	5.32	5.30
	SOYBEAN MEAL		
4729	44% Protein Solvent Extracted. Del- phos Soya Products Co., Delphos, Ohio. Sampled at General Cigar Co., Inc., Simsbury.	7 . 28	7.04
4734	44% Protein Solvent Extracted. Del- phos Soya Products Co., Delphos, Ohio. Sampled at General Cigar Co., Inc., Simsbury.	7.04	7.04
4741	44% Protein Solvent Extracted. Del- phos Soya Products Co., Delphos, Ohio. Sampled at Hartman Tobacco Corp., Bloomfield.	7.48	7.04
	MISCELLANEOUS		
5009	Agrinite Plant Food. American Agricultural Chemical Co., N.Y., N.Y. Sampled at Louis Perillo Coal Co., Inc., Southington.	7.72	7.00
5605	Brookside's Horn Meal. Broodside Nurseries, Inc., Darien, Conn. Sampled at Brookside Nurseries, Inc., Darien.	14.96	14.00
5877	Cascio's Organite. Peter Cascio Nursery, Inc., West Hartford, Conn. Sampled at Peter Cascio Nursery, Inc., West Hartford.	6.80	7.00

~ Indicates deficiencies. / Unregistered.

⁶ Potash: Guaranteed, 1.00%; found, 1.61%.

TABLE 1.

Station No.	Manufacturer or jobber and dealer	Per o	
<u>~~~~</u>		F	G
5610	Calcium Nitrate (Irsobin) Made in West Germany. International Minerals & Chemical Corp., Woburn, Mass. Sampled at A. N. Pierson, Inc., Cromwell.	14.56	••••
5761	Dried Blood. Consolidated Rendering Co., Boston, Mass. Sampled at Spring- field Rendering Co., Chicopee, Mass.	12.24	12.00
5560*	Dried Blood. Goulard & Olena, Inc., Skillman, N.J. Sampled at Leon Ezzell, Inc., Stamford.	12.24	10.00
5355*	First Aid Brand Grass Seed & Fertilizer Mixture. Loft's Pedigreed Seed, Inc., Bound Brook, N.J. Sampled at Drazen Lumber Co., North Haven.	3,36	1.00
5658	Nitroform. Hercules Powder Co., Inc., Wilmington, Del. Sampled at Hub- bard-Hall Chemical Co., Portland.	38.08	38.00
5199	Scott's Bonus. O.M.Scott & Sons, Co., Marysville, Ohio. Sampled at Libner Grain Co., Inc., Norwalk.	25.44	25.00

^{*} Small package sample.

TABLE 2.

	ANALYSES OF SUPERPHOSPHATE, ETC.
Station No.	Manufacturer or jobber and dealer
	SUPERPHOSPHATE
5207 ¹	Agri-Phos. American Agricultural Chemical Co., New York, N.Y. Sampled at Conn. State Prison, Hazardville.
5340	Agri-Phos. American Agricultural Chemical Co., New York, N.Y. Sampled at Fairfield Hills Hospital, Newtown.
5133	Agway 20. Agway, Inc., Syracuse, New York. Sampled at Agway, Inc., Putnam.
5251 ¹	Corenco. Consolidated Rendering Co., Boston, Mass. Sampled at Conn. State Farm for Women, Niantic.
4897	Davco Granulated. W. R. Grace & Co., Davison Chemical Division, Baltimore, Md. Sampled at Checkerboard Feed Store, Willimantic.
5874	Eastern States. Agway, Inc., Syracuse, New York. Sampled at Walter W. Simmons & Son, Inc., Granby.
5280 ¹	Eastern States Triple. Agway, Inc., Syracuse, New York. Sampled at University of Connecticut, Storrs.
5943	Granular Triple. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hubbard-Hall Chemical Co., Portland.
5780	Liberty. The Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hubbard-Hall Chemical Co., Windsorville.
5224	Old Fox Agricultural Sales, Inc., East Providence, R.I. Sampled at Old Fox Agricultural Sales, Inc., Hazardville.

Triple Granulated. Cadwell & Jones, Inc., Hartford, Conn. Sampled at Hartman Tobacco Co., Bloomfield.

4735

¹ State purchase.

Commercial Fertilizers TABLE 2.

ANALYSES OF SUPERPHOSPHATE, ETC.

Per cent phosphoric acid "Available" Citrate insoluble Total F G 0.14 20.14 20.00 20.00 0.33 20.49 20.16 20.00 1.59 21.45 19.86 20.00 0.09 20.65 20.56 20.00 1.62 21.25 19.63 20.00 1.21 21.39 20.18 20.00 46.00 0.37 47.75 47.38 0.39 45.57 45.18 46.00 0.06 20.96 20.90 20.00 0.33 20.82 20.49 20.00 46.65 0.91 47.56 46.00

..... Indicates deficiencies.

TABLE 2.

ANAI VERS OF SHOPP DUOSDUATE FTC

	ANALISES OF SOFEKI HOST IMITE, ETC.
Station No.	Manufacturer or jobber and dealer
4722/	Triple Superphosphate. Consolidated Rendering Co., Boston, Mass. Sampled at General Cigar Co., Inc. Simsbury.
5298/1	Triple Superphosphate. Consolidated Rendering Co., Boston, Mass. Sampled at State Highway Dept., Portland
	DI-CALCIUM PHOSPHATE
4704	Eastman Gelatine Corp., Peabody, Mass. Sampled at Hatheway-Steane Corp., West Suffield.
4721	Eastman Gelatine Corp., Peabody, Mass. Sampled at General Cigar Co., Inc., Simsbury.
4731	Eastman Gelatine Corp., Peabody, Mass. Sampled at General Cigar Co., Inc., Granby.
4806	Eastman Gelatine Corp., Peabody, Mass. Sampled at General Cigar Co., Inc., Granby.

PHOSPHATE ROCK

Ground Undissolved. Baugh & Sons Co., Baltimore, Md. Sampled at Hubbard-Hall Chemical Co., Portland. 5650

Commercial Fertilizers TABLE 2.

ANALYSES OF SUPERPHOSPHATE, ETC.

Per cent phosphoric acid			
Citrate		''Avai	lable''
insoluble	Total	F	G
0.84	45.61	44.77	46.00
0.79	45.00	44.21	46.00
••••	••••	42.22	41.78
••••	••••	42.47	41.78
• • • •	•••	42.84	41.78
••••	••••	41.71	41.78
		34.46	33,50

^{.....} Indicates deficiencies.

TABLE 3.

ANALYSES OF POTASH SALTS, ETC.

	Manufacturer or jobber and dealer	Per o	
		F	G
	FRITTED POTASH		
5572	Robert B. Peters Co., Inc., Allentown, Penna. Sampled at Hubbard-Hall Chemical Co., Portland.	15.64	15.00
	CARBONATE OF POTASH		
4744/	Solvay Calcined. Allied Chemical Co., N.Y., N.Y. Sampled at Hartman Tobacco Co., Bloomfield.	63.56	67.47
	MURIATE OF POTASH		
5725/	American Agricultural Chemical Co., Carteret, N.J. Sampled at Gar- dener's Center, Inc., Darien.	60.50	60.00
5284 ¹	Eastern States. Agway, Inc., Syra- cuse, N.Y. Sampled at Univ. of Connecticut, Storrs.	60.28	60.00
5208 ¹	Hubbard-Hall Chemical Co., Water- bury, Conn. Sampled at Conn. State Prison, Hazardville.	60.28	60.00
5777	Hubbard-Hall Chemical Co., Water- bury, Conn. Sampled at Hubbard- Hall Chemical Co., Windsorville.	60.56	60.00
5468	International Minerals & Chemical Corp., Canada, Ltd., Ontario, Cana- da. Sampled at Agway, Inc., Buckland.	61.16	60.00
5771	Old Fox Agricultural Sales, Inc., East Providence, R.I. Sampled at Leland R. Hawthorne, Hazardville.	58.56	60.00
	NITRATE OF POTASH		
4723/	Southwest Potash Corp., N.Y., N.Y. Sampled at General Cigar Co., Inc., Simsbury.	44.28	44.00
4718/	Southwest Potash Corp., N.Y., N.Y. Sampled at Hatheway-Steane Corp., West Suffield.	45.72	44.00

Indicates deficiencies. / Unregistered.

¹ State purchase.

TABLE 3.

ANALYSES OF POTASH SALTS, ETC.

_			
Station No.	Manufacturer or jobber and dealer	Per o	
<i>ω</i>		F	G
5609 <i>/</i>	Southwest Potash Corp., N.Y., N.Y. Sampled at A.N. Pierson, Inc., Cromwell.	44.10	44.00
4717/	Irsobin (Made in W. Germany). Hub- bard-Hall Chemical Co., Waterbury, Conn. Sampled at Hatheway-Steane Corp., West Suffield.	47, 24	44.00
	NITRATE OF SODA-POTASH		
5776	Chilean Nitrate Sales Corp., N. Y., N. Y. Sampled at Hubbard-Hall Chem- ical Co., Windsorville.	13.53	14.00
	SULPHATE OF POTASH		
5 47 3/	Agway, Inc., Syracuse, N.Y. Sampled at Agway, Inc., Buckland.	52.06	52.00
4743	International Minerals & Chemical Corp., Skokie, Ill. Sampled at Hartman Tobacco Co., Bloomfield.	23.60	50.00
	SULPHATE OF POTASH-MAGNESIA		
4736	Sul-Po-Mag. International Minerals & Chemical Corp., Skokie, Ill. Sampled at Hartman Tobacco Corp., Bloomfield.	50.92	21.00
	COTTON HULL ASHES		
5606	Hubbard-Hall Chemical Co., Water- bury, Conn. Sampled at Brookside Nurseries, Inc., Darien.	27.62	••••

TABLE 4.

ANALYSES OF GROUND FISH, BONE, ETC.

Station No.	Manufacturer of jobber and dealer
	DRY GROUND FISH
4702	Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hatheway & Steane Corp., West Suffield.
4728	Consorcio Pesquero, Peru, S.A. Sampled at General Cigar Co., Inc., Farm 1, Simsbury.
4732	Consorcio Pesquero, Peru, S.A. Sampled at General Cigar Co., Inc., Farm 3, Granby.
4737	Consorcio Pesquero, Peru, S.A. Sampled at Hartman Tobacco Co., Bloomfield.
	BONE MEAL
4989	Armour Agricultural Chemical Co., Atlanta, Ga. Sampled at G.E. Madison, Southington.
4960	Baugh Chemical Co., Philadelphia, Pa. Sampled at A.S. Labieniec, Kensington.
5604	Brookside, Nurseries, Inc., Darien, Conn. Sampled at Brookside Nurseries, Inc., Darien.
4946/	Comark Corp., Ithaca, N.Y. Sampled at Agway, Inc., Kensington.
4948	Comark Corp., Ithaca, N.Y. Sampled at Agway, Inc., Kensington.
5134*	Comark Corp., Ithaca, N.Y. Sampled at Agway, Inc., Putnam.
4862	Consolidated Rendering Co., Boston, Mass. Sampled at Wolf Savitsky & Sons, Inc., Shelton.
5285 ¹	Consolidated Rendering Co., Boston, Mass. Sampled at Mansfield State Training School, Mansfield.
5766	Consolidated Rendering Co., Boston, Mass. Sampled at Thompsonville Garden Center, Thompsonville.

[/] Unregistered.

¹ State purchase.

^{*} Small package sample.

Commercial Fertilizers TABLE 4. ANALYSES OF GROUND FISH, BONE, ETC.

Total Nitrogen (Per cent)		Total Phosphoric Acid (Per cent)		Mechanical analysis (Per cent)	
F	G	F	G	Fine	Course
10.72	10.00	5.48	5.00		
10.64	••••	6.57			
10.72	• • • •	6.39	• • • •		
11.00	••••	6.07	••••		
2.76	2.30	25.36	23.00	50.0	50.0
1.52	1.00	32.58	30.00	60.0	40.0
• • • •	••••	32.22	30.00	52.0	48.0
2.96	2.30	24.42	24.00	49.0	51.0
2.32	1.00	28.86²	23.00	70.0	30.0
2.12	1.00	28.52 ³	24.00	••••	
1.44	1.00	32.10	23.00	55.0	45.0
1.24	1.00	30.62	23.00	77.0	23.0
2.08	2.00	26.94	22.00	62.0	38.0

²"Available" phosphoric acid: Guaranteed, 11.00%; found, 15.77%.

³"Available" phosphoric acid: Guaranteed, 12.00%; found, 15.42%.

TABLE 4.

ANALYSES OF GROUND FISH, BONE, ETC.

Station No.	Manufacturer or jobber and dealer
4915	Faesy & Besthoff, Inc., Edgewater, N.J. Sampled at Fonicello's Home & Garden Center, Guilford.
5192	GPG Grain Corp., Norwalk, Conn. Sampled at Libner Grain Co., Inc., Norwalk.
5176	Goulard & Olena, Inc., Skillman, New Jersey. Sampled at East Hartford Nursery, East Hartford.
5747	Goulard & Olena, Inc., Skillman, New Jersey. Sampled at Renzulli Bros. Garden Center, Norwalk.
4937	A.H. Hoffman, Inc., Landisville, Penna. Sampled at Barker's Discount Store, Meriden.
5724	Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at The Gardener's Center, Inc., Darien.
5266*	Specialty Products Co., Latty, Ohio. Sampled at Orbit Dept. Store, Groton.
4954*	Swift & Co., New Haven, Conn. Sampled at King's Dept. Store, Meriden.
5804	Swift & Co., New Haven, Conn. Sampled at Stratford Town Fair, Inc., Stratford.
	DIAMMONIUM PHOSPHATE
5648	Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hubbard-Hall Chemical Co., Portland.
5666	International Minerals & Chemical Corp., Skokie, Ill. Sampled at The Mamlon Co., Orange.

^{*} Small package sample.

^{~~~} Indicates deficiencies.

^{4 &}quot;Available" phosphoric acid:Guaranteed, 11.69%; found, 18.70%.

⁵ "Available" phosphoric acid:Guaranteed, 11.00%; found, 20.24%.

Commercial Fertilizers TABLE 4. ANALYSES OF GROUND FISH, BONE, ETC.

Total Nitrogen (Per cent)		Total Phosphoric Acid (Per cent)		Mechanical analyses (Per cent)	
F	G	F	G	Fine	Course
2.48	2.47	29.21 ⁴	23,00	56.0	44.0
1.92	1.50	29.22	27.00	68.0	32.0
1.44	1.00	31.94 ⁵	22.00	54.0	46.0
••••	••••	31.54	23.00	52.0	48.0
2.36	2.00	27 . 66 ⁶	22.00	60.0	40.0
1.43	1.00	30.56	30.00	50.0	50.0
2.24	2.00	29.50 ⁷	• • • •	75.0	25.0
2.84	2.47	24.68	23.00	52.0	48.0
1.00	1.00	32.82 ⁸	23.00	48.0	52.0
17.76	18.00	44.05 ⁹	••••	••••	
18,88	18.00	47.64 ¹⁰	••••	••••	••••

^{6 &}quot;Available" phosphoric acid: Guaranteed, 11.00%; found, 16.98%.

^{7 &}quot;Available" phosphoric acid: Guaranteed, 15.00%; found, 17.01%.

⁸ "Available" phosphoric acid: Guaranteed, 11.69%; found, 17.90%.

^{9 &}quot;Available" phosphoric acid: Guaranteed, 46.00%; found, 44.03%.

^{10 &}quot;Available" phosphoric acid: Guaranteed, 46.00%; found, 47.60%.

TABLE 5.

Station No.	Ratio, grade and brand
5540/ 5709 4825/12 5694/ 56071 5219/ 5544	0-1-1 0-20-20 AA Quality Fertilizer 0-20-20 Corenco Fertilizer 0-20-20 Corenco Fertilizer (20 lbs. Borax/ton) 0-20-20 Davco 3-G Granulated Fertilizer 0-20-20 Hubbard-Hall (20lbs. Borax/ton) 0-20-20 Old Fox Fertilizer 0-25-25 Eastern States Fertilizer
5697 5283 ¹³ 5236 5024 ¹⁴ 5533/ 5938 5338 ⁵ 5855	0-1-2 0-15-30 AA Quality Fertilizer 0-15-30 AA Quality Fertilizer (20 lbs. Borax/ton) 0-15-30 Corenco Fertilizer 0-15-30 Corenco Fertilizer (20 lbs. Borax/ton) 0-15-30 Davco 3-G Granulated Fertilizer 0-15-30 Liberty Fertilizer 0-15-30 Liberty Fertilizer (Custom Mixed w. Borax) 0-15-30 Old Fox Fertilizer
5542 5178 ⁶ 5934	0-1-3 0-10-30 Agrico Phosphate & Potash 0-10-30 Agway Free Flow 0-10-30 Liberty Fertilizer
5827 4863 5238/ 4976	1- 1- 0 5- 5- 0 Armour Armorganic Plant Food 5- 5- 0 Corenco Organic Turf Fertilizer 5- 5- 0 Kay-Bee Pel-Organic Turf Food 5- 5- 0 Organi-Green
5807/ 5598 4885* 4918 5240 5390* 53877 5936	1- 1- 1 2- 2- 2 Fertrell 4- 4- 4 Brookside's Nature's Lawn Food 5- 5- 5 Chemton Liquid Plant Food 7- 7- 7 Corenco Fertilizer 7- 7- 7 Corenco Rhododendron, Azalea & Blueberry Special 7- 7- 7 Hart's Rose Food 7- 7- 7 Lebanon Rose Food 7- 7- 7 Liberty Fertilizer

^{*} Small package sample. / Unregistered.

² Boron: Guaranteed, 0.11%; found, 0.095%.

³ Boron: Guaranteed, 0.11%; found, 0.22%.

⁴ Boron: Guaranteed, 0.11%; found, 0.089%.

Commercial Fertilizers

TABLE 5.
ANALYSES OF MIXED FERTILIZERS

	ANA.	LISES OF I	MIXED FERI	ILIZERS	
Mfr.	Per cent organic	Per cent total	Per cent available	Per cent water-	Per cent
No.	nitrogen Sol. Insol.	nitrogen	phosphoric	soluble potash	magnesium
	501. 111301.		acia	potasii	
6 34		• • • •	19.37 19.13	18.18 20.02	• • • •
34	• • • • • • • • • • • • • • • • • • • •	• • • •	17.23 23.32	30.56	• • • •
63 78	• • • • • • • • • • • • • • • • • • • •	• • • •	23.32	20.40 20.64	
104		• • • •	18.09 16.69	21.52	• • • •
3	• • • • • • • • • • • • • • • • • • • •	• • • •	25, 28	25.24	
6			16.09	29.70	
6		• • • •	14.81	29.17 28.92	• • • •
34 34			17.47 17.08	30.10	
63			16.42	25.80 37.14	
78 78		• • • •	10.30	37.14	• • • •
104		• • • •	14.18 13.37	28.52 28.00	• • • •
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
6			10.19	27.60	
3		• • • •	10.40	29.45	
78	• • • • • • • • • • • • • • • • • • • •	• • • •	9.99	30.70	• • • •
11	0.24 4.88	5.12	5.91		
34 83	0.32 4.76 0.40 4.52	5.08 5.08	6.25 4.84		
87	0.16 5.10	7.88	7.09		
101	0.38 1.02	1.40	0.95	2.05	
22	0.40 3.96	4.36	5, 18	4.05	• • • •
70	3.84 0.00	5.04	5.00	5.13	• • • •
34	0.48 0.00	7.44	7. 76	8.12	• • • •
34	0.16 0.12 1.04 1.56	7.52	7. 26	7.18 7.81	
71 88	1.04 1.56 0.58 2.90	7.48 7.48	7.04 7.44	6.20	
78	1.48 0.00	7.16	7.35	7.46	

~~~ Indicates deficiencies.

<sup>1</sup> State purchase.

<sup>&</sup>lt;sup>5</sup> Boron: Guaranteed, 0.00%; found, 0.11%.

<sup>6</sup> Boron: Guaranteed, 0.45%; found, 0.52%.

<sup>&</sup>lt;sup>7</sup> Iron: Guaranteed, 0.075%; found, 2.09%.

| Station<br>No.                 |                      | Ratio, grade and brand                                      |
|--------------------------------|----------------------|-------------------------------------------------------------|
| 5142                           | 7- 7- 7              | Old Fox Fertilizer                                          |
| 5726/                          | 7- 7- 7              | Professional Tree & Shrub Food (30% Organic)                |
| 5012                           | 8-8-8                | Agrico Rose Food                                            |
| 5596                           | 8-8-8                | Brookside's Nature's Nutrients                              |
| 526 <b>7</b> *                 | 8-8-8                | EnVee All Purpose Plant Food                                |
| 5147/                          | 8- 8- 8              | Finelawn General Purpose                                    |
| 5491                           | 8- 8- 8              | Greenlife Rose Food                                         |
| 5716/                          | 8-8-8                | Homestead All Purpose Fertilizer                            |
| 5011                           | 10-10-10             | AA Quality Fertilizer                                       |
| 5495/                          | 10-10-10             | Agrico for Top Dressing                                     |
| 4945 <sup>8</sup>              | 10-10-10             | Agway Granular Fortilizar with 0.6 Mg                       |
| 4810<br>4971                   | 10-10-10<br>10-10-10 | Agway Granular Fertilizer with 0.6 Mg Corenco Fertilizer    |
| 5534/                          | 10-10-10             | Dayco 3-G Granulated Fertilizer                             |
| 5608/1                         | 10-10-10             | Hubbard-Hall (10 lbs. Borax/ton)                            |
| 5935/                          | 10-10-10             | Lawn Craft Turf Food (25% St. Org.)                         |
| $4824^{1}$                     | 10-10-10             | Liberty Fertilizer                                          |
| 5122 <sup>1</sup>              | 10-10-10             | Liberty Fertilizer                                          |
| 5139                           | 10-10-10             | Liberty Fertilizer                                          |
| 5252 <sup>1</sup>              | 10-10-10             | Liberty Fertilizer                                          |
| 5305                           | 10-10-10             | Liberty Fertilizer                                          |
| 4993                           | 10-10-10             | Liberty Fertilizer contains Aldrin                          |
| 5286¹                          | 10-10-10             | Liberty Fertilizer (Custom Mixed w. Borax)                  |
| 5339                           | 10-10-10             | Liberty Fertilizer (Custom Mixed w. Borax)                  |
| 5140/                          | 10-10-10             | New Formula Rainbow Premium Plant Food with 1.8 Mg          |
| 5137                           | 10-10-10             | New Formula Super Rainbow Premium Plant                     |
|                                |                      | Food with 2.4 Mg                                            |
| 5135                           | 10-10-10             | Old Fox Fertilizer                                          |
| 5719*                          | 10-10-10             | Plantabbs Liquid Plant Food                                 |
| 5539/                          | 12-12-12             | Agrico Top Dressing                                         |
| 5466/                          | 12-12-12             | Eastern States LC with 1.2 Mg                               |
| 5561 <i>/</i> ,                | 13-13-13             | Ammo-Phos Fertilizer with Potash                            |
| 5494/                          | 15-15-15             | Agrico for Top Dressing                                     |
| 520619                         | 15-15-15             | Agway Ferti Flow                                            |
| 5250110                        | 15-15-15             | Agway Ferti Flow                                            |
| 5279111                        | 15-15-15             | Agway Ferti Flow                                            |
| 5551 <sup>12</sup>             | 15-15-15             | Agway Ferti Flow                                            |
| 5708/                          | 15-15-15             | Corenco Fertilizer                                          |
| 5519                           | 15-15-15             | Liberty Fertilizer                                          |
| 585 <b>7/</b><br>55 <b>7</b> 1 | 15-15-15             | Old Fox Fertilizer                                          |
| 5570                           | 15-15-15<br>18-18-18 | Peter's Geranium Special Fer Mel General Purpose Plant Food |
| 2210                           | 10-10-10             | Ter wer deneral rurpose riant rood                          |

<sup>\*</sup> Small package sample.

<sup>/</sup> Unregistered.

<sup>&</sup>lt;sup>8</sup> Boron: Guaranteed, 0.02%; found, 0.018%.

<sup>9</sup> Boron: Guaranteed, 0.02%; found, 0.024%.

<sup>10</sup> Boron: Guaranteed, 0.02%; found, 0.25%.

TABLE 5.
ANALYSES OF MIXED FERTILIZERS.

|           |              |              |                   | MIXED FERT              |                   |           |
|-----------|--------------|--------------|-------------------|-------------------------|-------------------|-----------|
| Mfr.      |              | cent         | Per cent          | Per cent                | Per cent          | Per cent  |
| No.       |              | anic<br>ogen | total<br>nitrogen | available<br>phosphoric | water-<br>soluble | magnesium |
| 140.      | Sol.         | Insol.       | miti og en        | acid                    | potash            | magnesium |
|           |              |              |                   |                         |                   |           |
| 104       | 0.16         | 0.00         | 7.08              | 7.46                    | 7.31              | • • • •   |
| 117       | 1.76         | 0.88         | 7.44              | 7. 79                   | 7.42              |           |
| 6         | 1.44         | 1.04         | 8.72              | 7.37                    | 9.54              | • • • •   |
| 22<br>77  | 1.78         | 6.26<br>0.00 | 8.92              | 10.35                   | 7-75              | • • • •   |
| 18        | 4.40<br>0.10 | 0.18         | 8.00<br>5.88      | 6.83<br>9.19            | 8.48<br>9.39      | • • • •   |
| 66        | 5.32         | 1.16         | 8.80              | 7. 98                   | 9.37              | • • • •   |
| 6         | 1.24         | 1.24         | 8.08              | 7. 21                   | 8.26              | • • • •   |
| 6         | 0.40         | 0.24         | 10.24             | 10.28                   | 11.38             |           |
| 6         | 3.20         | 0.16         | 10.00             | 9.85                    | 10.02             |           |
| 3         | 0.72         | 0.14         | 10.32             | 10.20                   | 10.32             |           |
| 3         | 0.56         | 0.12         | 10.16             | 10.38                   | 10.41             | 0.99      |
| 34        | 0.40         | 0.00         | 10.00             | 10. 16                  | 12.78             | • • • •   |
| 63        | 0.40         | 0.00         | 10.32             | 2.71                    | 10.12             |           |
| 78<br>79  | 2.90         | 0.14         | 10.88<br>10.94    | 9.73<br>10.12           | 9.15              | • • • •   |
| 78<br>78  | 2.72<br>0.32 | 0.14         | 10.94             | 9.68                    | 9.60<br>11.36     | • • • •   |
| 78        | 0.08         | 0.00         | 9.60              | 10.06                   | 11.29             | • • • •   |
| 78        | 0.08         | 0.00         | 10.00             | 2.52                    | 11.87             |           |
| 78        | 0.48         | 0.10         | 10.00             | 10.15                   | 10.09             | • • • •   |
| 78        | 0.72         | 0.00         | 9.20              | 10.44                   | 10.09             |           |
| 78        | 3.50         | 0.18         | 10.16             | 9.18                    | 12.85             |           |
| 78        | 0.16         | 0.00         | 10.00             | 9.56<br>10.06           | 10.76             | • • • •   |
| 78        | 0.32         | 0.00         | 2.20              | 10.06                   | 11.10             | • • • •   |
| 82        | 0.08         | 0.10         | 9.36              | 10.23                   | 11.22             | 2.16      |
| 0.3       | 0.1/         | 0.10         |                   | 0.45                    | 10.03             | 2.7/      |
| 82<br>104 | 0.16         | 0.10<br>0.00 | 10.08<br>9.60     | 9.45 $10.03$            | 10.02<br>10.67    | 2.76      |
| 113       | 10.96        | 0.00         | 10.96             | 10.60                   | 10.07             | • • • •   |
| 6         | 0.32         | 0.10         | 12.00             | 12, 22                  | 12.44             | • • • •   |
| 3         | 0.48         | 0.00         | 12.00             | 12.46                   | 12.30             | 1.52      |
| 105       | 0.16         | 0.00         | 13.44             | 12.74                   | 13.67             | • • • •   |
| 6         | 2.88         | 0.10         | 15.04             | 14.36                   | 15.32             |           |
| 3         | 0.40         | 0.00         | 15.12             | 14.43                   | 15.12             |           |
| 3         | 0.22         | 0.00         | 15.04             | 13.62                   | 15.66             | • • • •   |
| 3         | 0.56         | 0.00         | 15.20             | 14.72                   | 15.30             |           |
| 3<br>34   | 0.00<br>0.80 | 0.00<br>0.00 | 15.28<br>14.08    | 15.05<br>13.57          | 15.32<br>16.74    | • • • •   |
| 78        | 0.80         | 0.14         | 14.80             | 11.12                   | 15.40             | • • • •   |
| 104       | 0.00         | 0.00         | 14.64             | 13.92                   | 15.10             |           |
| 112       | 4.96         | 0.00         | 16.88             | 16.82                   | 15.69             | • • • •   |
| 97        | 9.52         | 0.00         | 19.12             | 19.29                   | 18.74             | • • • •   |
|           |              |              |                   | 1                       |                   |           |

~~~ Indicates deficiencies. 

1 State purchase.

¹¹ Boron: Guaranteed, 0.02%; found, 0.026%.

¹² Boron: Guaranteed, 0.02%; found, 0.018%.

| | 1111111 | TISES OF MIXED FERTILIZERS |
|---|---|---|
| Station
No. | | Ratio, grade and brand |
| 5303*
4929* ¹³
5567 | 20-20-20
20-20-20
20-20-20 | Cross Country Instant Plant Food
Greenfield Instant Plant Food
Peters General Purpose |
| 4953* 5478/ 4950 5825 5812 5183/ 5526 5524 5879 4860 | 1- 2- 1
4- 8- 4
5-10- 5
5-10- 5
5-10- 5
5-10- 5
5-10- 5
5-10- 5
5-10- 5
5-10- 5
5-10- 5 | Hy-Trous Liquid Fertilizer AA Plant Food AA Quality Fertilizer Armour Home & Garden Special Armour Vertagreen for Lawn & Gardens Armour Vertagreen Rose Food Blue Ribbon Lawn & Garden Fertilizer C & J Homogeneous Granulated Fertilizer C & J Plant Food Cascio's Professional Lawn Food Corenco Fertilizer |
| 5662
4861*
5710
5643
5558/
4916*
4965
5328 | 5-10-5
5-10-5
5-10-5
5-10-5
5-10-5
5-10-5
5-10-5
5-10-5 | Corenco Home Garden & Lawn Starter Corenco Rose Food Corenco Rose Food Deerfield Plant Food Ezzell's Verdo Lawn Food F & B Garden Food F & B Garden Food Fairlawn Fertilizer |
| 5325
5693/
5881*
5957
4990
4986
5357
5392* | 5-10-5
5-10-5
5-10-5
5-10-5
5-10-5
5-10-5
5-10-5
5-10-5 | Finelawn Fertilizer Garden Food G & O Prizegro for Gardens G & O Prizegro for Gardens G & O Prizegro for Gardens Green Ribbon Plant Food Gro Fast Plant Food Hart's All Purpose Plant Food Hart's Plant Food |
| 5263*
5332/
4812
4829
5612
5751
5191
5839
4880/ | 5-10- 5
5-10- 5
5-10- 5
5-10- 5
5-10- 5
5-10- 5
5-10- 5
5-10- 5
5-10- 5 | Hoffman Rose Food Holiday Flower & Garden Fertilizer Homestead Farm Style Fertilizer Hubbard-Hall Plant Food Hubbard-Hall Plant Food (50% Organic) Just Right Fertilizer Lawn & Garden Lawn Master Liberty Plant Food |
| 5028
5587/ | 5-10- 5
5-10- 5 | Luzerne All Purpose Plant Food Mathieson Pelleted Fertilizer |

^{*} Small package sample.

[/] Unregistered.

^{~~~} Indicates deficiencies:

TABLE 5.
ANALYSES OF MIXED FERTILIZERS

| | | ANAI | YSES OF N | MIXED FERT | ILIZERS | |
|-----------|--------------|----------------|---------------|-----------------------------|-------------------|-----------|
| Mfr. | Per | cent | Per cent | Per cent | Per cent | Per cent |
| | _ | anic | total | available | water- | |
| No. | Sol. | ogen
Insol. | nitrogen | phosphoric
acid | soluble
potash | magnesium |
| | 501. | 111501. | | aciu | potasn | |
| 124 | 12.80 | 0.00 | 20.96 | 19.67 | 19.18 | |
| 42 | 9.12 | 0.00 | 20.16 | 20.53 | 20.22 | |
| 112 | 8.84 | 0.00 | 20.08 | 20.10 | 19.10 | |
| | | | | | | |
| | | | | | | |
| 80 | 1.20 | 0.00 | 4.60 | 8.64 | 4.91 | |
| 6 | 0.48 | 0.28 | 6.04 | 9.43 | 5.54 | • • • • |
| 6
11 | 0.32 | 0.08 | 5.00 | 9 . 77
10. 00 | 5.52 | • • • • |
| 11 | 0.10 | 0.10 | 5.08
5.00 | 11.05 | 5.50
5.04 | • • • • |
| 11 | 0.00 | 1.24 | 6.44 | 9.71 | 5.24 | • • • • |
| 1 | 0.00 | 0.46 | 5.80 | 9.83 | 6.23 | |
| 24 | 0.32 | 0.00 | 5.80 | 10.03 | 5.72 | |
| 24 | 0.16 | 0.16 | 5.68 | 10.11 | 6.36 | |
| 27 | 0.16 | 0.12 | 6.52 | 9.67 | 5.02 | • • • • |
| 34 | 0.40 | 0.17 | 5.48 | 9.63 | 5.05 | • • • • |
| 34
34 | 0.32 | 0.30 | 5.56
4.80 | 10.05
9.73 | 5.37
8.12 | • • • • |
| 34 | 1.02 | 0.88 | 6.64 | 11.68 | 8.10 | • • • • |
| 103 | 1.44 | 0.00 | 6.44 | 9.34 | 5.52 | |
| 47 | 1.32 | 0.00 | 6.40 | 9.93 | 5.05 | • • • • |
| 48 | 0.16 | 0, 58 | 5.14 | 10.95 | 5.71 | |
| 48 | 0.32 | 0.40 | 5.84 | 9.27 | 6.36 | • • • • |
| 18 | 0.16 | 0.18 | 5.88 | 10.35 | 6.75 | |
| 18
63 | 2.04 | 0.16 | 5.24 | 9.69
9.63 | 5.01 | • • • • |
| 62 | 0.10 | 0.64 | 5.00
5.56 | 9.03
9.88 | 5.73
5.45 | • • • • |
| 62 | 1.40 | 0.54 | 5.68 | 10.06 | 6.13 | • • • • |
| 67 | 1.52 | 0.00 | 5.60 | 10.36 | 5.35 | |
| 68 | 1.48 | 0.00 | 5 . 48 | 10.15 | 5.35 | |
| 71 | 0.24 | 0.14 | 5.72 | 9.37 | 5.46 | |
| 71 | 0.48 | 0.16 | 5.88 | 10.00 | 5. 27· | |
| 75
86 | 0.40 | 1.32 | 5.96 | 10.17 | 6.03 | • • • • |
| 6 | 4.48
0.08 | 0.26 | 10.82
5.56 | 11.81
9.48 | 6.65
5.21 | • • • • |
| 78 | 1.44 | 2.06 | 6.08 | 9.40 | 5.67 | • • • • |
| 78 | 1. 28 | 2.24 | 6.24 | 12.04 | 5.11 | |
| 69 | 0.60 | 0.32 | 5.00 | 10.67 | 5.85 | |
| 53 | 0.44 | 0.16 | 5.64 | 10.43 | 5.25 | |
| 53 | 0.34 | 0.10 | 6.28 | 9.37 | 5.20 | |
| 78 | 1.80 | 0.00 | 5.48 | 10.10 | 5.20 | • • • • |
| 92
105 | 0.00 | 0.20 | 5.48
5.16 | 10.09 | 5.55 | |
| 105 | 0.00. | 0.00 | 5. 16 | 10.46 | 5.25 | |

Boron: Guaranteed, 0.026%; found, 0.021%.
 Iron: Guaranteed, 0.105%; found, 0.15%.
 Copper: Guaranteed, 0.051%; found, 0.047%.
 Zinc: Guaranteed, 0.071%; found, 0.074%.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| | ANAL | I SES OF MIXED FERTILIZERS |
|---|--|---|
| Station
No. | | Ratio, grade and brand |
| 4871/
5143
5527*
4934
4875
5255
5258* ¹⁴
5117/
4884
5744/
4975/
5595 | 5-10- 5
5-10- 5 | Mr. Turf's Flower & Garden Fertilizer Old Fox Garden Food for Lawns & Gardens Pennsylvania Dutch Plant Food Perk-Up Plant Food Fertilizer Plantation Quality Fertilizer Sears Economy Fertilizer Sears Rose Food with Chelated Iron Spur Lawn & Garden Turf King Lawn & Garden Fertilizer Union Fertilizer Valu-Gro Agrico Garden & Lawn Fertilizer |
| 5713
5389*
5336*
5718*
5376*
4830*
4811* | 10-20-10
10-20-10
10-20-10
13-26-13
15-30-15
16-32-16 | Eastern States Fertilizer with 0.6 Mg New Era Rose Food Specialty All Purpose Food Pellets Hy-Gro Garden & Lawn Food Cross Country Instant Tomato Food Stern's Miracle-Gro Eastern States Start-N-Gro |
| 5537
5010
4821
5714 ¹⁵
5826
5950
5396
4911
5188
5952
5535/
4823
4886* ¹⁶
5764 ¹⁷
5557/
5148/
4978*
5333*
4985 ¹
5221 | 1- 2- 2
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10
5-10-10 | AA Quality Fertilizer with 1.2 Mg Agrico for Potatoes with 1.2 Mg Agway with 1.8 Mg Agway with 1.8 Mg Armour Vertagreen Acid Loving Plant Food Breck's Garden Gro with 1.2 Mg C & J Homogeneous Granulated Fertilizer Corenco Fertilizer Corenco Fertilizer Corenco Liquid Fertilizer Concentrate Davco 3-G Granulated Fertilizer Eastern States Plant Food with 1.8 Mg F & B Azalea, Camellia, Rhododendron Food F & B Azalea, Camellia, Rhododendron Food Federal Lawn Life for Gardens with 1.2 Mg Finelawn Azalea & Camellia Food G & O Tomato & Fruit Food Hoffman Fertilizer for Garden Liberty Fertilizer with 1.2 Mg Liberty Fertilizer |
| 5509
5516 | 5-10-10
5-10-10 | Liberty Fertilizer
Liberty Fertilizer |

^{*} Small package sample. / Unregistered.

¹⁴ Iron: Guaranteed, 0.10%; found, 0.70%.

¹⁵ Boron: Guaranteed, 0.02%; found, 0.017%.

TABLE 5.
ANALYSES OF MIXED FERTILIZERS

| | | AINA | LYSES OF I | MIXED FERT | ILIZEKS | |
|-------|---------|--------|------------|------------|----------|------------|
| Mfr. | Per | cent | Per cent | Per cent | Per cent | Per cent |
| 14177 | | anic | total | available | water- | 1 CI CCIII |
| No. | | ogen | nitrogen | phosphoric | soluble | magnesium |
| 140. | | | millogen | acid | | magnesium |
| | Sol. | Insol. | | aciu | potash | |
| 00 | 4 12 | 0.30 | 0 73 | 10 70 | / 0.4 | |
| 99 | 4.12 | 0.20 | 8.72 | 10.79 | 6.84 | • • • • |
| 104 | 0.00 | 0.16 | 5. 28 | 10.24 | 5.53 | • • • • |
| 88 | 0.48 | 0.14 | 5.00 | 9.42 | 5.06 | • • • • |
| 111 | 1.72 | 0.00 | 5.40 | 10.03 | 5.76 | • • • • |
| 18 | • • • • | 0.00 | 5.44 | 2.67 | 5.54 | • • • • |
| 124 | 1.04 | 0.60 | 5.88 | 10.24 | 5.15 | • • • • |
| 124 | 1.88 | 0.22 | 6.20 | 9.42 | 5.16 | |
| 1 | 0.22 | 0.46 | 5.80 | 10.14 | 5.55 | |
| 1 | 0.12 | 0.44 | 6.08 | 9.34 | 5.77 | • • • • |
| 141 | 0.72 | 0.00 | 5.28 | 9.53 | 5.38 | |
| 141 | 0.24 | 0.10 | 5.40 | 9, 73 | 5.67 | |
| 6 | 1.68 | 1.40 | 9.00 | 14.59 | 8.32 | |
| 3 | 0.48 | 0.12 | 10.08 | 19.66 | 9.92 | 1.00 |
| 31 | 3.76 | 0.00 | 11.52 | 20.67 | 10.39 | |
| 129 | 2.16 | 0.18 | 11.28 | 22.28 | 11.06 | |
| 113 | 0.16 | 0.00 | 14.00 | 27.68 | 14.08 | |
| 124 | 8.48 | 0.00 | 15.04 | 29.93 | 15.52 | •••• |
| 132 | 8.32 | 0.00 | 15.52 | 31.15 | 15.44 | •••• |
| 3 | 1. 76 | 0.00 | 16.24 | 33.07 | 16.04 | • • • • |
| , | 1. 70 | 0.00 | 10.24 | 33.01 | 10.04 | • • • • |
| | | | | | | |
| | | | | | | |
| 6 | 0.32 | 0.00 | 5.36 | 2.67 | 10.07 | 2.02 |
| 6 | 0.68 | 0.00 | 4.76 | 9.87 | 10.70 | 1.60 |
| 3 | 0.56 | 0.00 | 5.12 | 10.08 | 10.00 | 3.28 |
| 3 | 0.32 | 0.00 | 5.36 | 9.93 | 9.91 | 2.88 |
| 11 | 0.52 | 1.00 | 6.20 | 10.23 | 10.22 | |
| 12 | 0.00 | 0.08 | 5.60 | 10.01 | 10.66 | 2.40 |
| 24 | 0.08 | 0.00 | 5.04 | 10.51 | 10.51 | |
| 34 | 0.08 | 0.12 | 5.52 | 10.17 | 10.18 | |
| 34 | 0.16 | 0.00 | 5.28 | 10.17 | 10.43 | |
| 34 | 0.32 | 0.00 | 5.36 | 10.14 | 10.12 | |
| 63 | 0.16 | 0.00 | 5.20 | 10.13 | 10.20 | |
| 3 | 0.10 | 0.00 | 5.28 | 10.13 | 10.20 | 3.24 |
| 48 | 3.04 | 0.00 | 5.00 | 10.20 | 10.07 | |
| 48 | 2.56 | 0.32 | 5.00 | 10.35 | 10.24 | • • • • |
| | | | | | | 2 5/ |
| 53 | 0.92 | 0.20 | 6.40 | 10.02 | 2.56 | 2,54 |
| 18 | 0.88 | 0.00 | 5.00 | 9.56 | 10.40 | • • • • |
| 62 | 0.32 | 0.12 | 5.24 | 2.77 | 11.03 | • • • • |
| 75 | 0.30 | 0.18 | 4.48 | 10.54 | 12.46 | |
| 78 | 0.52 | 0.32 | 5.32 | 10.02 | 10.08 | 1.27 |
| 78 | 1.76 | 0.00 | 5.24 | 10.92 | 10.15 | |
| 78 | 0.46 | 0.34 | 5.28 | 10.07 | 10.18 | • • • • |
| 78 | 0.38 | 0.38 | 5.56 | 10.02 | 10.45 | |

..... Indicates deficiencies.

1 State purchase.

 $^{^{16}}$ Iron: Guaranteed, 0.15%; found, 0.73%.

¹⁷ Iron: Guaranteed, 0.15%; found, 0.73%.

| | 211121 | TOES OF WILLES TERRITORIES |
|--------------------|-----------|---|
| Station
No. | | Ratio, grade and brand |
| 5717 ¹ | 5-10-10 | Liberty Fertilizer |
| 5119 | 5-10-10 | Liberty Fertilizer with 1.2 Mg |
| 5655 | 5-10-10 | Liberty Fertilizer with 2 lbs. Actual Disysto N |
| 5518 | 5-10-10 | Liberty Fertilizer contains Chlordane |
| 5939 | 5-10-10 | Liberty Super Grow with 1.2 Mg |
| 5772/ | 5-10-10 | Old Fox Fertilizer |
| 5856 | 5-10-10 | Old Fox Fertilizer with 1.2 Mg |
| 5562/ | 5-10-10 | Olin Fertilizer |
| 5295* | 5-10-10 | Vigoro Azalea & Camellia Food |
| 5329 | 5-10-10 | Vigoro Azalea & Camellia Food |
| 493618 | 5-10-10 | Vigoro Evergreen Food |
| 594419 | 5-10-10 | Vitogro Evergreen Food |
| 5190* | 6-12-12 | Armour Vertagreen Tomato Plant Food |
| 5692 | 8-16-16 | AA Quality Fertilizer |
| 5873 | 8-16-16 | Agway |
| 5125 ²⁰ | 8-16-16 | Agway Free Flow |
| 5698 ²¹ | 8-16-16 | Agway Free Flow |
| 5234 | 8-16-16 | Corenco |
| 5536/ | 8-16-16 | Davco 3-G Granulated Fertilizer |
| 5342 | 8-16-16 | Liberty Fertilizer |
| 5023 ¹ | 8-16-16 | Liberty Fertilizer |
| 5774 | 8-16-16 | Liberty Fertilizer |
| 4826^{1} | 8-16-16 | Liberty Fertilizer |
| 5858 | 8-16-16 | Old Fox Fertilizer |
| 5689 | 10-20-20 | Agrico for Corn |
| 5715 ²² | 10-20-20 | Agway Ferti Flow |
| 4808 | 10-20-20 | Eastern States |
| 5517/ | 10-20-20 | Liberty Fertilizer |
| 5225/ | 10-20-20 | Old Fox |
| • | | |
| | 1 - 3 - 1 | |
| 5277* | 5-15- 5 | Ortho Up-Start |
| 4867* | 6-18- 6 | New Era Liquid African Violet Food |
| 5013* | 6-18- 6 | Ortho Liquid Tomato Food |
| 5543* | 6-18- 6 | Plantdrops Instant Liquid African Violet Food |
| 3313 | 0 10 0 | 1 Lantar opp missant might be a seen a seen |
| | 2- 1- 1 | |
| 4000 | | |
| 4908 | 4- 2- 2 | Pax Crabgrass Control |
| 5951 | 10- 5- 5 | Corenco Liquid-Green |
| 4917 | 10- 5- 5 | Corenco Organo |
| 5026 ²³ | 10- 5- 5 | Du Pont Trey Triple Action Lawn Aid |
| 51411 | 10- 5- 5 | Eastern States Green Lawn with 2.4 Mg |
| | | |

^{*} Small package sample.

[/] Unregistered.

¹⁸ Iron: Guaranteed, 0.15%; found 0.41%.

¹⁹ Iron: Guaranteed, 0.15%; found, 1.01%.

²⁰ Boron: Guaranteed: 0.02%; found, 0.031%.

Commercial Fertilizers

TABLE 5.
ANALYSES OF MIXED FERTILIZERS

| | ANALISES OF MIXED FERTILIZERS | | | | | |
|------|-------------------------------|--------|----------|---------------------|---------------------|-----------------|
| Mfr. | Per | cent | Per cent | Per cent | Per cent | Per cent |
| | | anic | total | available | water- | 1 01 00110 |
| NIO | nitrogen | | | phosphoric | soluble | ma a ma a di um |
| No. | | | nitrogen | | | magnesium |
| | Sol. | Insol. | | acid | potash | |
| 70 | 1 / 1 | 0 00 | r 22 | 10.40 | 10.02 | |
| 78 | 1.64 | 0.00 | 5.32 | 10.49 | 10.03 | |
| 78 | 1.64 | 0.00 | 5, 16 | 10.55 | 10.06 | 2.52 |
| 78 | 1.04 | 0.22 | 5.48 | 2.34 | 10.20 | |
| 78 | 0.60 | 0.48 | 5.48 | 2.67 | 10.21 | |
| 78 | 1.04 | 0.12 | 5,32 | 9.81 | 2.69 | 2.72 |
| 104 | 1.04 | 0.12 | 8.24 | 9.46 | 8,86 | |
| 104 | 0.00 | 0.00 | 6.12 | $1\widetilde{0.24}$ | $1\widetilde{0.04}$ | 2.12 |
| 105 | 0.16 | 0.00 | 5.00 | 10.94 | 10.18 | |
| 135 | 0.16 | 0.16 | 5.00 | 10.01 | 10.11 | • • • • |
| 135 | 0.24 | 0.58 | 5.08 | 8.21 | 11.04 | • • • • |
| 135 | 0.16 | 0.50 | 5.00 | 9.90 | | • • • • |
| | | | | | 10.02 | • • • • |
| 135 | 0.16 | 0.16 | 4.88 | 2.73 | 10.65 | |
| 11 | 0.04 | 0.00 | 5.48 | 11.51 | 12.34 | • • • • |
| 6 | 0.00 | 0.00 | 8.00 | 15.86 | 16.08 | • • • • |
| 3 | 0.64 | 0.00 | 8.36 | 16.15 | 16.24 | |
| 3 | 1.08 | 0.00 | 8.44 | 14.90 | 16.62 | |
| 3 | 0.08 | 0.00 | 8.40 | 15.67 | 16.30 | |
| 34 | 1.40 | 0.16 | 7.88 | 14.32 | 16.06 | |
| 63 | 0.48 | 0.00 | 8.00 | 16.03 | 17.28 | |
| 78 | 0.16 | 0.00 | 7.00 | 16.54 | 16.00 | |
| 78 | 1.20 | 0.00 | 7.04 | 16.62 | 16.74 | |
| 78 | 0.38 | 0.00 | 7.18 | 15.66 | 16.66 | • • • • |
| 78 | 0.24 | 0.00 | 6.80 | 16.48 | 18.28 | • • • • |
| 104 | 0.08 | 0.12 | 7.48 | | 16.00 | • • • • |
| 6 | | | 1 6 33 | 15.41 | | • • • • |
| | 0.08 | 0.12 | 10.32 | 12.50 | 18.82 | • • • • |
| 3 | 0.64 | 0.10 | 10.00 | 12.08 | 20.16 | |
| 3 | 0.32 | 0.10 | 10.24 | 18.91 | 21.06 | • • • • |
| 78 | 0.48 | 0.10 | 8.66 | 15.56 | 20.78 | |
| 104 | 0.00 | 0.10 | 10.42 | 20.81 | 19.62 | |
| | | | | | | |
| | | | | | | |
| 20 | 0.00 | 0.00 | F 00 | 15 21 | F 02 | |
| 29 | 0.00 | 0.00 | 5.00 | 15.31 | 5.03 | |
| 31 | 0.00 | 0.00 | 6.60 | 19.70 | 6.76 | |
| 29 | 0.00 | 0.00 | 6.10 | 18.89 | 6.49 | |
| 136 | 0.08 | 0.00 | 6.08 | 18.90 | 6.05 | |
| | | | | | | |
| | | | | | | |
| 100 | | 0.00 | 4 | | | |
| 109 | | 0.00 | 4.32 | 35.26 | 2.35 | |
| 34 | 7. 28 | 0.00 | 10.24 | 5.39 | 5.29 | |
| 34 | | .0.64 | 10.32 | 5.04 | 5.63 | |
| 40 | 3.92 | 4.32 | 10.56 | 6.08 | 5.97 | |
| 3 | 2. 26 | 5.50 | 10.32 | 5.53 | 5.43 | 4.91 |
| | | | · | | | |

~~~ Indicates deficiencies.

<sup>1</sup> State purchase.

Boron: Guaranteed, 0.02%; found, 0.015%.

Boron: Guaranteed, 0.02%; found, 0.045%.

<sup>&</sup>lt;sup>23</sup> Iron: Guaranteed, 0.25%; found, 1.76%.

| Station<br>No.                                                                                                                                   |                                                                                                                                  | Ratio, grade and brand                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5757/<br>4850                                                                                                                                    | 10- 5- 5<br>10- 5- 5                                                                                                             | Godfrey's Lawn & Tree Food<br>Greenfield Triple Action Crabgrass Killer &<br>Lawn Food                                                                                                                                                                                                                                                                                |
| 5836<br>5553<br>5522*<br>5235/<br>5359/<br>5588/<br>5171*<br>5121 <sup>1</sup><br>5467<br>5508                                                   | 10- 5- 5<br>10- 5- 5                                     | Hubbard-Hall Luxura Lawn Food Lawncraft Turf Food (70% of Nit. is Org.) Liquid Vigoro Plant Food for House Plants Platt's Hi-Organic Lawn Fertilizer Platt's Hi-Organic Lawn Fertilizer Policastro's Blue Chip Turf & Tree Food Re/Vive Evergreen Food Squire Applegate Greenlawn Squire Applegate Greenlawn Woodruff's Lawn & Tree Food                              |
| 5262 <sup>24</sup>                                                                                                                               | 12- 6- 6                                                                                                                         | EnVee Triple Action Crabgrass Killer plus<br>Lawn Food - Insecticide                                                                                                                                                                                                                                                                                                  |
| 4974/<br>5880/                                                                                                                                   | 12- 6- 6<br>12- 6- 6                                                                                                             | G & O Super-Hyganic Lawn Food<br>G & O Super-Hyganic Lawn Food with Crab-<br>grass & Insect Killer                                                                                                                                                                                                                                                                    |
| 5746/<br>5371*<br>5810 <sup>25</sup><br>5505<br>5801<br>5201<br>5538<br>5302<br>5127<br>5027 <sup>26</sup><br>5344 <sup>27</sup><br>4865<br>5569 | 12- 6- 6<br>12- 6- 6<br>12- 6- 6<br>12- 6- 6<br>16- 8- 8<br>16- 8- 8<br>16- 8- 8<br>16- 8- 8<br>20-10-10<br>20-10-10<br>24-12-12 | G & O Super-Hyganic Weed Killer with 2,4-D Ortho-Gro Liquid Plant Food Ortho-Gro Liquid Plant Food Ortho Liquid Plant Food Agrico Country Club Fertilizer Agrico Grass Food Agrico for Plowdown Sears Lawn Quick Green Squire Applegate Pro-Green Granular DuPont Turf Food DuPont Turf Food with 2,4-D Weed Killer Heritage House Lawn Food Fer-Mel Turf & Tree Food |
| 5265* 5759 5731 5778 5659 5657 5853 5854 5391*                                                                                                   | 2- 1- 2<br>2- 1- 2<br>4- 2- 4<br>6- 3- 6<br>6- 3- 6<br>6- 3- 6<br>6- 3- 6<br>6- 3- 6<br>6- 3- 6<br>6- 3- 6                       | New Plant Life Fertrell Super "N" Armour Gold Bond Tobacco Grower Liberty Tobacco Fertilizer Liberty Tobacco Fertilizer Half & Half Liberty Tobacco Fertilizer Pomace Base Old Fox Tobacco Fertilizer Old Fox Tobacco Fertilizer with 1.2 Mg Eeesy Grow                                                                                                               |

<sup>\*</sup> Small package sample.

<sup>/</sup> Unregistered.

<sup>&</sup>lt;sup>24</sup> Sulfur: Guaranteed, 2.75%; found, 6.83%.

Iron: Guaranteed, 0.50%; found, 0.16%. Zinc: Guaranteed, 0.10%; found, 0.10%.

TABLE 5.

| Mfr. organic No.         Per cent organic nitrogen Sol. Insol.         Per cent total nitrogen nitrogen nitrogen soluble phosphoric acid         Per cent water soluble potash           16         3.60         5.00         10.00         6.30         5.43            42         3.72         1.36         10.44         5.56         5.10            78         3.06         4.46         10.40         5.64         5.18            78         1.92         5.36         10.32         5.29         5.70            135         7.68         0.00         9.44         4.62         5.02            114         3.96         0.52         10.32         6.23         5.04            114         3.96         0.52         10.32         6.23         5.04            114         3.96         0.52         10.32         6.23         5.01            114         3.96         0.52         10.32         6.23         5.01            114         3.96         0.52         10.32         6.23                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      | ANALYSES OF MIXED FERTILIZERS |      |       |        |       |           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------------------------|------|-------|--------|-------|-----------|
| No.         nitrogen Sol. Insol.         nitrogen acid         phosphoric acid         soluble potash         magnesium potash           16         3.60         5.00         10.00         6.30         5.43            42         3.72         1.36         10.44         5.56         5.10            78         3.06         4.46         10.40         5.64         5.18            78         1.92         5.36         10.32         5.29         5.70            135         7.68         0.00         9.44         4.62         5.02            114         3.96         0.52         10.32         6.23         5.04            114         3.96         0.52         10.32         6.23         5.04            114         3.96         0.52         10.32         6.23         5.04            115         1.98         4.48         10.00         5.07         4.63            3         2.34         5.50         10.24         5.24         5.83            3         2.40         5.26         10.24         5.30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Mfr. |                               |      |       |        |       | Per cent  |
| Sol. Insol.         acid         potash           16         3.60         5.00         10.00         6.30         5.43           42         3.72         1.36         10.44         5.56         5.10           78         3.06         4.46         10.40         5.64         5.18           78         1.92         5.36         10.32         5.29         5.70           135         7.68         0.00         9.44         4.62         5.02           114         3.96         0.52         10.32         6.23         5.04           114         3.96         0.52         10.32         6.23         5.04           114         3.96         0.52         10.32         6.23         5.04           114         3.96         0.52         10.32         6.23         5.04           114         3.96         0.52         10.32         5.79         5.01           115         1.98         4.48         10.00         5.07         4.63         3.33           3.240         5.26         10.24         5.30         5.37         148           48         5.20         2.06         10.06         5.82                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No.  |                               |      |       |        |       | magnesium |
| 42       3.72       1.36       10.44       5.56       5.10         78       3.06       4.46       10.40       5.64       5.18         78       1.92       5.36       10.32       5.29       5.70         135       7.68       0.00       9.44       4.62       5.02         114       3.96       0.52       10.32       6.23       5.04         114       3.52       0.58       10.00       5.79       5.01         115       1.98       4.48       10.00       5.00       5.41         77       6.58       0.62       10.40       5.07       4.63         3       2.34       5.50       10.24       5.24       5.83         3       2.34       5.50       10.24       5.30       5.37         148       5.20       2.06       10.06       5.82       5.19         77       4.30       0.10       12.08       6.57       6.77         62       1.68       3.04       12.24       5.86       6.52         62       1.62       3.62       12.80       5.81       6.14         62       1.68       5.06       12.64       5.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |                               | _    |       |        |       |           |
| 42       3.72       1.36       10.44       5.56       5.10         78       3.06       4.46       10.40       5.64       5.18         78       1.92       5.36       10.32       5.29       5.70         135       7.68       0.00       9.44       4.62       5.02         114       3.96       0.52       10.32       6.23       5.04         114       3.52       0.58       10.00       5.79       5.01         115       1.98       4.48       10.00       5.00       5.41         77       6.58       0.62       10.40       5.07       4.63         3       2.34       5.50       10.24       5.24       5.83         3       2.34       5.50       10.24       5.30       5.37         148       5.20       2.06       10.06       5.82       5.19         77       4.30       0.10       12.08       6.57       6.77         62       1.68       3.04       12.24       5.86       6.52         62       1.62       3.62       12.80       5.81       6.14         62       1.68       5.06       12.64       5.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |                               |      |       |        |       |           |
| 78       3.06       4.46       10.40       5.64       5.18         78       1.92       5.36       10.32       5.29       5.70         135       7.68       0.00       9.44       4.62       5.02         114       3.96       0.52       10.32       6.23       5.04         114       3.52       0.58       10.00       5.79       5.01         115       1.98       4.48       10.00       5.00       5.41         77       6.58       0.62       10.40       5.07       4.63         3       2.34       5.50       10.24       5.24       5.83         3       2.40       5.26       10.24       5.30       5.37         148       5.20       2.06       10.06       5.82       5.19         77       4.30       0.10       12.08       6.57       6.77         62       1.68       3.04       12.24       5.86       6.52         62       1.62       3.62       12.80       5.81       6.14         62       1.68       5.06       12.64       5.00       6.33         29       12.16       0.00       12.76       6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 16   | 3.60                          | 5.00 | 10.00 | 6.30   | 5.43  | • • • •   |
| 78       3.06       4.46       10.40       5.64       5.18         78       1.92       5.36       10.32       5.29       5.70         135       7.68       0.00       9.44       4.62       5.02         114       3.96       0.52       10.32       6.23       5.04         114       3.52       0.58       10.00       5.79       5.01         115       1.98       4.48       10.00       5.00       5.41         77       6.58       0.62       10.40       5.07       4.63         3       2.34       5.50       10.24       5.24       5.83         3       2.40       5.26       10.24       5.30       5.37         148       5.20       2.06       10.06       5.82       5.19         77       4.30       0.10       12.08       6.57       6.77         62       1.68       3.04       12.24       5.86       6.52         62       1.62       3.62       12.80       5.81       6.14         62       1.68       5.06       12.64       5.00       6.33         29       12.16       0.00       12.76       6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 42   | 3 72                          | 1 36 | 10 44 | 5 56   | 5 10  |           |
| 78       1,92       5,36       10,32       5,29       5,70         135       7,68       0.00       9,44       4,62       5,02         114       3,96       0.52       10,32       6,23       5,04         114       3,52       0.58       10,00       5,79       5,01         115       1,98       4,48       10,00       5,00       5,41         77       6,58       0.62       10,40       5,07       4,63         3       2,34       5,50       10,24       5,24       5,83         3       2,40       5,26       10,24       5,30       5,37         148       5,20       2,06       10,06       5,82       5,19         77       4,30       0.10       12,08       6,57       6,77         62       1,68       3,04       12,24       5,86       6,52         62       1,68       3,04       12,24       5,86       6,52         62       1,68       5,06       12,64       5,00       6,33          29       12,16       0.00       12,76       6,33       6,17          29       12,16       0.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |                               |      |       |        |       | • • • •   |
| 135       7.68       0.00       9.44       4.62       5.02         114       3.96       0.52       10.32       6.23       5.04         114       3.52       0.58       10.00       5.79       5.01         115       1.98       4.48       10.00       5.07       4.63         3       2.34       5.50       10.24       5.24       5.83         3       2.40       5.26       10.24       5.24       5.83         3       2.40       5.26       10.24       5.30       5.37         148       5.20       2.06       10.06       5.82       5.19         77       4.30       0.10       12.08       6.57       6.77         62       1.68       3.04       12.24       5.86       6.52         62       1.62       3.62       12.80       5.81       6.14         62       1.68       5.06       12.64       5.00       6.33         29       12.00       0.00       12.76       6.33       6.17         29       12.48       0.00       12.88       6.21       6.68         6       0.72       0.00       16.00       9.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |                               |      |       | 5, 29  |       |           |
| 114       3.96       0.52       10.32       6.23       5.04         114       3.52       0.58       10.00       5.79       5.01         115       1.98       4.48       10.00       5.00       5.41         77       6.58       0.62       10.40       5.07       4.63         3       2.34       5.50       10.24       5.24       5.83         3       2.40       5.26       10.24       5.30       5.37         148       5.20       2.06       10.06       5.82       5.19         77       4.30       0.10       12.08       6.57       6.77         62       1.68       3.04       12.24       5.86       6.52         62       1.68       3.04       12.24       5.86       6.52         62       1.68       5.06       12.64       5.00       6.33          62       1.68       5.06       12.64       5.00       6.33          29       12.16       0.00       12.76       6.33       6.17       6.68         6       0.72       0.00       16.00       9.48       8.84          6 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |                               |      |       |        |       |           |
| 114       3.52       0.58       10.00       5.79       5.01         115       1.98       4.48       10.00       5.00       5.41         77       6.58       0.62       10.40       5.07       4.63       3.3         3       2.34       5.50       10.24       5.24       5.83       3.7         148       5.20       2.06       10.06       5.82       5.19         77       4.30       0.10       12.08       6.57       6.77         62       1.68       3.04       12.24       5.86       6.52         62       1.68       3.04       12.24       5.86       6.52         62       1.68       5.06       12.64       5.00       6.33          62       1.68       5.06       12.64       5.00       6.33          62       1.68       5.06       12.64       5.00       6.33          62       1.68       5.06       12.64       5.00       6.33          62       1.68       5.06       6.21       6.68       6.61         72       12.16       0.00       12.76       6.33       6.17 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |                               |      |       |        |       |           |
| 115       1.98       4.48       10.00       5.00       5.41          77       6.58       0.62       10.40       5.07       4.63          3       2.34       5.50       10.24       5.24       5.83          3       2.40       5.26       10.24       5.30       5.37          148       5.20       2.06       10.06       5.82       5.19         77       4.30       0.10       12.08       6.57       6.77          62       1.68       3.04       12.24       5.86       6.52          62       1.68       3.04       12.24       5.86       6.52          62       1.62       3.62       12.80       5.81       6.14          62       1.68       5.06       12.64       5.00       6.33          29       12.16       0.00       12.76       6.33       6.17          29       12.48       0.00       12.88       6.21       6.68        6       0.72       0.00       16.24       9.25       8.15        124       0.72                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 114  | 3.52                          |      |       |        |       |           |
| 3       2.34       5.50       10.24       5.24       5.83          3       2.40       5.26       10.24       5.30       5.37          148       5.20       2.06       10.06       5.82       5.19          77       4.30       0.10       12.08       6.57       6.77          62       1.68       3.04       12.24       5.86       6.52          62       1.68       5.06       12.64       5.00       6.33          62       1.68       5.06       12.64       5.00       6.33          29       12.16       0.00       12.76       6.33       6.17          29       12.48       0.00       12.88       6.21       6.68          6       0.72       0.00       16.00       9.48       8.84          6       5.04       6.64       17.68       9.18       9.50          6       0.32       0.00       16.24       9.25       8.15          124       0.72       0.20       16.48       6.93       8.16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 115  | 1.98                          |      |       |        |       | • • • •   |
| 3       2.34       5.50       10.24       5.24       5.83          3       2.40       5.26       10.24       5.30       5.37          148       5.20       2.06       10.06       5.82       5.19          77       4.30       0.10       12.08       6.57       6.77          62       1.68       3.04       12.24       5.86       6.52          62       1.68       5.06       12.64       5.00       6.33          62       1.68       5.06       12.64       5.00       6.33          29       12.00       0.00       12.88       6.01       6.20          29       12.16       0.00       12.76       6.33       6.17          29       12.48       0.00       12.88       6.21       6.68          6       0.72       0.00       16.00       9.48       8.84          6       5.04       6.64       17.68       9.18       9.50          6       0.32       0.00       16.24       9.25       8.15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 77   | 6.58                          | 0.62 | 10.40 | 5.07   | 4.63  |           |
| 3       2.40       5.26       10.24       5.30       5.37          148       5.20       2.06       10.06       5.82       5.19          77       4.30       0.10       12.08       6.57       6.77          62       1.68       3.04       12.24       5.86       6.52          62       1.62       3.62       12.80       5.81       6.14          62       1.68       5.06       12.64       5.00       6.33          29       12.00       0.00       12.88       6.01       6.20          29       12.16       0.00       12.76       6.33       6.17          29       12.48       0.00       12.88       6.21       6.68          6       0.72       0.00       16.00       9.48       8.84          6       5.04       6.64       17.68       9.18       9.50          6       0.32       0.00       16.24       9.25       8.15          124       0.72       0.20       16.48       6.23       8.16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3    | 2.34                          | 5.50 | 10.24 | 5.24   | 5.83  |           |
| 148       5. 20       2.06       10.06       5.82       5.19         77       4.30       0.10       12.08       6.57       6.77         62       1.68       3.04       12.24       5.86       6.52         62       1.62       3.62       12.80       5.81       6.14         62       1.68       5.06       12.64       5.00       6.33         29       12.00       0.00       12.76       6.33       6.17         29       12.16       0.00       12.76       6.33       6.17         29       12.48       0.00       12.88       6.21       6.68         6       0.72       0.00       16.00       9.48       8.84          6       5.04       6.64       17.68       9.18       9.50          6       0.32       0.00       16.24       9.25       8.15          124       0.72       0.20       16.48       6.23       8.16          3       4.88       5.44       16.56       8.25       8.21          40       8.60       9.00       20.64       10.92       10.04                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3    | 2.40                          | 5.26 | 10.24 | 5.30   | 5.37  |           |
| 62       1.68       3.04       12.24       5.86       6.52         62       1.62       3.62       12.80       5.81       6.14         62       1.68       5.06       12.64       5.00       6.33         29       12.00       0.00       12.88       6.01       6.20         29       12.16       0.00       12.76       6.33       6.17         29       12.48       0.00       12.88       6.21       6.68         6       0.72       0.00       16.00       9.48       8.84         6       5.04       6.64       17.68       9.18       9.50         6       0.32       0.00       16.24       9.25       8.15         124       0.72       0.20       16.48       6.93       8.16         3       4.88       5.44       16.56       8.25       8.21         40       8.60       9.00       20.64       10.92       10.04         40       8.16       8.48       20.00       10.48       10.06         73       14.12       2.20       20.00       9.29       13.36         97       18.00       0.00       2.64 <t< td=""><td>148</td><td>5.20</td><td>2.06</td><td>10.06</td><td>5.82</td><td>5.19</td><td></td></t<>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 148  | 5.20                          | 2.06 | 10.06 | 5.82   | 5.19  |           |
| 62       1.68       3.04       12.24       5.86       6.52         62       1.62       3.62       12.80       5.81       6.14         62       1.68       5.06       12.64       5.00       6.33         29       12.00       0.00       12.88       6.01       6.20         29       12.16       0.00       12.76       6.33       6.17         29       12.48       0.00       12.88       6.21       6.68         6       0.72       0.00       16.00       9.48       8.84         6       5.04       6.64       17.68       9.18       9.50         6       0.32       0.00       16.24       9.25       8.15         124       0.72       0.20       16.48       6.93       8.16         3       4.88       5.44       16.56       8.25       8.21         40       8.60       9.00       20.64       10.92       10.04         40       8.16       8.48       20.00       10.48       10.06         73       14.12       2.20       20.00       9.29       13.36         97       18.00       0.00       2.64 <t< td=""><td>77</td><td>4 30</td><td>0 10</td><td>12.08</td><td>6 57</td><td>6 77</td><td></td></t<>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 77   | 4 30                          | 0 10 | 12.08 | 6 57   | 6 77  |           |
| 62 1.62 3.62 12.80 5.81 6.14 62 1.68 5.06 12.64 5.00 6.33 29 12.00 0.00 12.88 6.01 6.20 29 12.16 0.00 12.76 6.33 6.17 29 12.48 0.00 12.88 6.21 6.68 6 0.72 0.00 16.00 9.48 8.84 6 5.04 6.64 17.68 9.18 9.50 6 0.32 0.00 16.24 9.25 8.15 124 0.72 0.20 16.48 6.93 8.16 3 4.88 5.44 16.56 8.25 8.21 40 8.60 9.00 20.64 10.92 10.04 40 8.16 8.48 20.00 10.48 10.06 73 14.12 2.20 20.00 9.29 13.36 97 18.00 0.00 25.84 12.74 13.36  102 0.00 0.00 25.84 12.74 13.36  102 0.00 5.00 25.84 12.74 13.36 78 2.40 2.96 6.60 3.47 6.12 78 1.76 2.60 5.60 3.16 7.03 78 2.56 2.02 5.48 2.95 6.49 104 0.88 1.86 4.12 3.32 8.00 104 0.88 1.86 4.12 3.32 8.00 104 0.88 1.86 4.12 3.32 8.00 104 2.40 2.76 6.64 3.33 6.41 3.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |                               |      |       |        |       |           |
| 62       1.68       5.06       12.64       5.00       6.33         29       12.00       0.00       12.88       6.01       6.20         29       12.16       0.00       12.76       6.33       6.17         29       12.48       0.00       12.88       6.21       6.68         6       0.72       0.00       16.00       9.48       8.84         6       5.04       6.64       17.68       9.18       9.50         6       0.32       0.00       16.24       9.25       8.15         124       0.72       0.20       16.48       6.93       8.16         3       4.88       5.44       16.56       8.25       8.21         40       8.60       9.00       20.64       10.92       10.04         40       8.16       8.48       20.00       10.48       10.06         73       14.12       2.20       20.00       9.29       13.36         97       18.00       0.00       2.64       1.23       1.91         101       0.72       2.82       3.54       1.47       4.32         11       2.16       2.38       6.16 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |                               |      |       |        |       |           |
| 29       12.00       0.00       12.88       6.01       6.20         29       12.16       0.00       12.76       6.33       6.17         29       12.48       0.00       12.88       6.21       6.68         6       0.72       0.00       16.00       9.48       8.84         6       5.04       6.64       17.68       9.18       9.50         6       0.32       0.00       16.24       9.25       8.15         124       0.72       0.20       16.48       6.93       8.16         3       4.88       5.44       16.56       8.25       8.21         40       8.60       9.00       20.64       10.92       10.04         40       8.16       8.48       20.00       10.48       10.06         73       14.12       2.20       20.00       9.29       13.36         97       18.00       0.00       2.64       1.23       1.91         101       0.72       2.82       3.54       1.47       4.32         11       2.16       2.38       6.16       3.15       6.88         78       2.40       2.96       6.60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |                               |      |       |        |       | • • • •   |
| 29       12.16       0.00       12.76       6.33       6.17         29       12.48       0.00       12.88       6.21       6.68         6       0.72       0.00       16.00       9.48       8.84         6       5.04       6.64       17.68       9.18       9.50         6       0.32       0.00       16.24       9.25       8.15         124       0.72       0.20       16.48       6.93       8.16         3       4.88       5.44       16.56       8.25       8.21         40       8.60       9.00       20.64       10.92       10.04         40       8.16       8.48       20.00       10.48       10.06         73       14.12       2.20       20.00       9.29       13.36         97       18.00       0.00       25.84       12.74       13.36         102       0.00       0.00       2.64       1.23       1.91         101       0.72       2.82       3.54       1.47       4.32         11       2.16       2.38       6.16       3.15       6.88         78       2.40       2.96       6.60 <t< td=""><td></td><td></td><td></td><td>-</td><td></td><td></td><td>• • • •</td></t<>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |                               |      | -     |        |       | • • • •   |
| 29       12.48       0.00       12.88       6.21       6.68         6       0.72       0.00       16.00       9.48       8.84         6       5.04       6.64       17.68       9.18       9.50         6       0.32       0.00       16.24       9.25       8.15         124       0.72       0.20       16.48       6.93       8.16         3       4.88       5.44       16.56       8.25       8.21         40       8.60       9.00       20.64       10.92       10.04         40       8.16       8.48       20.00       10.48       10.06         73       14.12       2.20       20.00       9.29       13.36         97       18.00       0.00       25.84       12.74       13.36         102       0.00       0.00       2.64       1.23       1.91         101       0.72       2.82       3.54       1.47       4.32         11       2.16       2.38       6.16       3.15       6.88         78       2.40       2.96       6.60       3.47       6.12         78       1.76       2.60       5.60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |                               |      |       |        |       | • • • •   |
| 6 0.72 0.00 16.00 9.48 8.84 6.5 0.4 6.64 17.68 9.18 9.50 6.6 0.32 0.00 16.24 9.25 8.15 124 0.72 0.20 16.48 6.93 8.16 3 4.88 5.44 16.56 8.25 8.21 40 8.60 9.00 20.64 10.92 10.04 40 8.16 8.48 20.00 10.48 10.06 73 14.12 2.20 20.00 9.29 13.36 97 18.00 0.00 25.84 12.74 13.36 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.48 10.00 10.00 10.48 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00  |      | -                             |      |       |        |       | • • • •   |
| 6 5.04 6.64 17.68 9.18 9.50 6 0.32 0.00 16.24 9.25 8.15 124 0.72 0.20 16.48 6.93 8.16 3 4.88 5.44 16.56 8.25 8.21 40 8.60 9.00 20.64 10.92 10.04 40 8.16 8.48 20.00 10.48 10.06 73 14.12 2.20 20.00 9.29 13.36 97 18.00 0.00 25.84 12.74 13.36 10.00 10.00 25.84 12.74 13.36 10.00 10.00 25.84 12.74 13.36 10.00 10.00 25.84 12.74 13.36 10.00 10.00 25.84 12.74 13.36 10.00 10.00 25.84 12.74 13.36 10.00 10.00 10.00 25.84 12.74 13.36 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 1 |      |                               |      |       |        |       | • • • •   |
| 6 0.32 0.00 16.24 9.25 8.15 124 0.72 0.20 16.48 6.93 8.16 3 4.88 5.44 16.56 8.25 8.21 40 8.60 9.00 20.64 10.92 10.04 40 8.16 8.48 20.00 10.48 10.06 73 14.12 2.20 20.00 9.29 13.36 97 18.00 0.00 25.84 12.74 13.36  102 0.00 0.00 25.84 12.74 13.36  102 0.00 0.00 2.64 1.47 4.32 11 2.16 2.38 6.16 3.15 6.88 78 2.40 2.96 6.60 3.47 6.12 78 1.76 2.60 5.60 3.16 7.03 78 2.56 2.02 5.48 2.95 6.49 104 0.88 1.86 4.12 3.32 8.00 104 2.40 2.76 6.64 3.33 6.41 3.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |                               |      |       |        | 8.84  | • • • •   |
| 124       0.72       0.20       16.48       6.93       8.16         3       4.88       5.44       16.56       8.25       8.21         40       8.60       9.00       20.64       10.92       10.04         40       8.16       8.48       20.00       10.48       10.06         73       14.12       2.20       20.00       9.29       13.36         97       18.00       0.00       25.84       12.74       13.36         102       0.00       0.00       2.64       1.23       1.91         101       0.72       2.82       3.54       1.47       4.32         11       2.16       2.38       6.16       3.15       6.88         78       2.40       2.96       6.60       3.47       6.12         78       1.76       2.60       5.60       3.16       7.03         78       2.56       2.02       5.48       2.95       6.49         104       0.88       1.86       4.12       3.32       8.00         104       2.40       2.76       6.64       3.33       6.41       3.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |                               | -    |       | * *    |       | • • • •   |
| 3       4.88       5.44       16.56       8.25       8.21         40       8.60       9.00       20.64       10.92       10.04         40       8.16       8.48       20.00       10.48       10.06         73       14.12       2.20       20.00       9.29       13.36         97       18.00       0.00       25.84       12.74       13.36         102       0.00       0.00       2.64       1.23       1.91         101       0.72       2.82       3.54       1.47       4.32         11       2.16       2.38       6.16       3.15       6.88         78       2.40       2.96       6.60       3.47       6.12         78       1.76       2.60       5.60       3.16       7.03         78       2.56       2.02       5.48       2.95       6.49         104       0.88       1.86       4.12       3.32       8.00         104       2.40       2.76       6.64       3.33       6.41       3.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |                               |      |       |        |       | • • • •   |
| 40       8.60       9.00       20.64       10.92       10.04          40       8.16       8.48       20.00       10.48       10.06          73       14.12       2.20       20.00       9.29       13.36          97       18.00       0.00       25.84       12.74       13.36          102       0.00       0.00       2.64       1.23       1.91          101       0.72       2.82       3.54       1.47       4.32          11       2.16       2.38       6.16       3.15       6.88          78       2.40       2.96       6.60       3.47       6.12          78       1.76       2.60       5.60       3.16       7.03          78       2.56       2.02       5.48       2.95       6.49          104       0.88       1.86       4.12       3.32       8.00          104       2.40       2.76       6.64       3.33       6.41       3.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |                               |      |       |        |       | • • • •   |
| 40       8.16       8.48       20.00       10.48       10.06          73       14.12       2.20       20.00       9.29       13.36          97       18.00       0.00       25.84       12.74       13.36          102       0.00       0.00       2.64       1.23       1.91          101       0.72       2.82       3.54       1.47       4.32          11       2.16       2.38       6.16       3.15       6.88          78       2.40       2.96       6.60       3.47       6.12          78       1.76       2.60       5.60       3.16       7.03          78       2.56       2.02       5.48       2.95       6.49          104       0.88       1.86       4.12       3.32       8.00          104       2.40       2.76       6.64       3.33       6.41       3.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |                               |      |       |        |       | • • • •   |
| 73       14.12       2.20       20.00       9.29       13.36          97       18.00       0.00       25.84       12.74       13.36          102       0.00       0.00       2.64       1.23       1.91          101       0.72       2.82       3.54       1.47       4.32          11       2.16       2.38       6.16       3.15       6.88          78       2.40       2.96       6.60       3.47       6.12          78       1.76       2.60       5.60       3.16       7.03          78       2.56       2.02       5.48       2.95       6.49          104       0.88       1.86       4.12       3.32       8.00          104       2.40       2.76       6.64       3.33       6.41       3.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |                               |      |       |        |       | • • • •   |
| 97 18.00 0.00 25.84 12.74 13.36  102 0.00 0.00 2.64 1.23 1.91 101 0.72 2.82 3.54 1.47 4.32 11 2.16 2.38 6.16 3.15 6.88 78 2.40 2.96 6.60 3.47 6.12 78 1.76 2.60 5.60 3.16 7.03 78 2.56 2.02 5.48 2.95 6.49 104 0.88 1.86 4.12 3.32 8.00 104 2.40 2.76 6.64 3.33 6.41 3.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |                               |      |       |        |       | • • • •   |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |      | -                             |      | -     |        |       | • • • •   |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 71   | 10.00                         | 0.00 | 25.04 | 12. 74 | 15,50 | ••••      |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |                               |      |       |        |       |           |
| 11       2.16       2.38       6.16       3.15       6.88          78       2.40       2.96       6.60       3.47       6.12          78       1.76       2.60       5.60       3.16       7.03          78       2.56       2.02       5.48       2.95       6.49          104       0.88       1.86       4.12       3.32       8.00          104       2.40       2.76       6.64       3.33       6.41       3.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                               |      |       |        |       |           |
| 11       2.16       2.38       6.16       3.15       6.88          78       2.40       2.96       6.60       3.47       6.12          78       1.76       2.60       5.60       3.16       7.03          78       2.56       2.02       5.48       2.95       6.49          104       0.88       1.86       4.12       3.32       8.00          104       2.40       2.76       6.64       3.33       6.41       3.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                               |      |       |        |       |           |
| 78       1.76       2.60       5.60       3.16       7.03          78       2.56       2.02       5.48       2.95       6.49          104       0.88       1.86       4.12       3.32       8.00          104       2.40       2.76       6.64       3.33       6.41       3.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |                               |      | 6.16  |        |       |           |
| 78 2.56 2.02 $5.48$ 2.95 6.49 $104$ 0.88 1.86 $4.12$ 3.32 8.00 $104$ 2.40 2.76 6.64 3.33 6.41 3.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |                               |      |       |        |       | • • • •   |
| 104 0.88 1.86 4.12 3.32 8.00<br>104 2.40 2.76 6.64 3.33 6.41 3.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |                               |      |       |        |       | • • • •   |
| 104 2.40 2.76 $6.64$ 3.33 6.41 3.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |                               |      |       |        |       |           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |                               |      | ~~~   |        |       |           |
| 122 0.40 0.00 18.00 10.16 18.60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |                               |      |       |        |       |           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 122  | 0.40                          | 0.00 | 18.00 | 10.16  | 18.60 | ••••      |

..... Indicates deficiencies. 

1 State purchase.

<sup>&</sup>lt;sup>26</sup> Iron: Guaranteed, 0.50%; found, 0.70%.

<sup>&</sup>lt;sup>27</sup> Iron: Guaranteed, 0.50%; found, 1.09%.

| Station<br>No.                                                                                      |                                                                                                                                 | Ratio, grade and brand                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5850 <sup>28</sup><br>5953<br>5775/                                                                 | 2- 3- 3<br>4- 6- 6<br>8-12-12<br>8-12-12                                                                                        | Espoma Garden-Tone<br>Corenco Fertilizer with 0.9 Mg<br>Liberty Fertilizer with 1.2 Mg                                                                                                                       |
| 5346*<br>4992*<br>5155                                                                              | 2-5-2<br>4-10-4<br>4-10-4<br>4-10-4                                                                                             | Emerald Green Evergreen Food<br>Hubbard-Hall Evergreen Food<br>Hubbard-Hall Evergreen Food                                                                                                                   |
| 5838<br>5499<br>5501<br>4977*<br>5594*                                                              | 3-1-1<br>3-1-1<br>12-4-4<br>15-5-5<br>15-5-5<br>30-10-10                                                                        | Adorna<br>Davey Tree Food<br>Da-V-Green Lawn Food<br>Ortho-Gro Liquid Plant Food<br>Stern's Miracid                                                                                                          |
| 5781<br>5576<br>5941                                                                                | 3- 1- 2<br>12- 4- 8<br>12- 4- 8<br>12- 4- 8                                                                                     | Agrico Country Club Fertilizer<br>Fer-Mel Putting Green Turf Food<br>Lawncraft Turf Food VFT "24"                                                                                                            |
| 5691<br>4947<br>5341<br>5181 <sup>29</sup><br>5381<br>5233<br>5690/<br>5019<br>5138<br>5222<br>5577 | 3- 2- 2<br>15-10-10<br>15-10-10<br>15-10-10<br>15-10-10<br>15-10-10<br>15-10-10<br>15-10-10<br>15-10-10<br>15-10-10<br>21-14-14 | AA Quality Fertilizer Agway Agway Fertilizer Agway Ferti Flow C & J Lawn Food 7500 Corenco Fertilizer Davco 3-G Granulated Fertilizer Liberty Fertilizer New Formula Super Rainbow with 1.2 Mg Old Fox Agway |
| 5232<br>5940<br>5210                                                                                | 3- 4- 4<br>6- 8- 8<br>6- 8- 8<br>6- 8- 8                                                                                        | Corenco with 1.2 Mg<br>Liberty Super Spud with 1.2 Mg<br>Old Fox with 1.2 Mg                                                                                                                                 |

<sup>\*</sup> Small package sample. / Unregistered.

<sup>&</sup>lt;sup>28</sup> Boron: Guaranteed, 0.02%; found, 0.018%.

### Commercial Fertilizers

TABLE 5.
ANALYSES OF MIXED FERTILIZERS

|                  | ANALYSES OF MIXED FERTILIZERS |                |                       |                       |                    |              |
|------------------|-------------------------------|----------------|-----------------------|-----------------------|--------------------|--------------|
| Mfr.             |                               | cent<br>anic   | Per cent<br>total     | Per cent<br>available | Per cent<br>water- | Per cent     |
| No.              | nitr<br>Sol.                  | ogen<br>Insol. | nitrogen              | phosphoric<br>acid    | soluble<br>potash  | magnesium    |
|                  |                               |                |                       |                       |                    |              |
| 44<br>34         | 0.60<br>0.32                  | 0.88           | 6.04<br>8.00          | 6.91<br>11.84         | 6.60<br>11.85      | 1.20         |
| 78               | 0.16                          | 0.00           | 7.32                  | 11.87                 | 12.56              | 1.52         |
| F.4              | 1 22                          | 1 02           | 5 1/                  | 0.24                  | 4 04               |              |
| 54<br><b>7</b> 8 | 1.32                          | 1.92<br>1.02   | 5.16<br>5.16          | 9.24 $10.14$          | 4.04<br>5.35       | • • • •      |
| 78               | 0.86                          | 1.62           | 4.72                  | 2.55                  | 4.18               | ••••         |
| 140              | 0.48                          | 3.00           | 3.48                  | 2.99                  | 1.39               | • • • •      |
| 37<br>37         | 0.40<br>5.32                  | 0.52<br>4.44   | 11.68<br>15.12        | 5.13<br>5.39          | 4.65<br>5.86       | • • • •      |
| 29<br>132        | 14.96<br>26.56                | 0.00           | 15.68<br>31.68        | 5.18<br>10.38         | 6.59<br>10.45      |              |
|                  |                               |                |                       |                       |                    |              |
| 6<br>97          | 2.94<br>3.64                  | 5.14<br>2.84   | 12.00<br>13.52        | 4.27<br>4.44          | 8.19<br>8.54       | • • • •      |
| 78               | 2.54                          | 8.50           | 12.00                 | 5. 16                 | 7. 44              | ••••         |
| 6                | 0.40                          | 0.00           | 14.88                 | 10.67                 | 10.02              |              |
| 3                | 10.48                         | 0.00           | 15.20                 | 10.36                 | 10.50              | • • • •      |
| 3                | 4.80                          | 0.00           | 15.28<br>15.04        | 10.21                 | 10.58              | • • • •      |
| 24<br>34         | 0.72<br>0.56                  | 0.00<br>0.08   | $\frac{14.16}{15.20}$ | 10.98<br>8.08         | 10.04<br>9.46      |              |
| 63<br>78         | 0.32<br>0.48                  | 0.00           | 14.56<br>15.36        | 10.93<br>5.95         | 10.18<br>10.49     | • • • •      |
| 82<br>104        | 0.08<br>0.32                  | 0.00           | 15.28<br>13.44        | 9.21<br>11.06         | 10.02<br>10.72     | 1.44         |
| 3                | 0.12                          | 0.00           | 19.84                 | 13.01                 | 16.11              | • • • •      |
| 34               | 0.00                          | 0.00           | 6.44                  | 8.02                  | 9.00               | 1.24         |
| 78<br>104        | 1.36<br>0.08                  | 0.28           | 6.20<br>7.00          | 8.23<br>8.61          | 7.49<br>8.33       | 2.70<br>1.22 |
|                  |                               |                |                       | 0,01                  | 0,00               | 1.00         |

..... Indicates deficiencies. 

1 State purchase.

<sup>&</sup>lt;sup>29</sup> Boron: Guaranteed, 0.02%; found, 0.015%.

| Station<br>No.                                                                                   |                                                                                                            | Ratio, grade and brand                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4935<br>4955*<br>5947<br>5031                                                                    | 3- 5- 2<br>6-10- 4<br>6-10- 4<br>6-10- 4                                                                   | Vigoro All Purpose Complete Plant Food<br>Vigoro Rose Food<br>Vitogro Garden Grower<br>Grand Union Brand Lawn & Garden Fertilizer                                                                                                                                                                                                                                                            |
| 5806<br>5008<br>5948<br>5015/<br>5484<br>5353<br>4913<br>5395<br>5174<br>4991/<br>5260/<br>5203/ | 4- 2- 1 16- 8- 4 16- 8- 4 16- 8- 4 20-10- 5 20-10- 5 20-10- 5 20-10- 5 20-10- 5 20-10- 5 20-10- 5 20-10- 5 | Greenfield Springtime Triple Action Vitogro Lawn Food Vitogro Lawn Weeder & Feeder APCO Country Club Lawn Fertilizer Armour Lightweight Vertagreen Atlantic's Lightweight Fertilizer for Turf Burpee Lawn Food C & J Lawn Food with 2,4-D Weed Killer Conn. Nurserymen's Ass'n. Turf Food Deerfield Lightweight Lawn Food En Vee Lightweight Lawn Food Farmingdale Double Action Weed & Feed |
| 5504/<br>5326/<br>5157/<br>5758/<br>4868<br>5489<br>4864<br>4849                                 | 20-10- 5<br>20-10- 5<br>20-10- 5<br>20-10- 5<br>20-10- 5<br>20-10- 5<br>20-10- 5<br>20-10- 5               | Farmingdale High Analysis Turf Food Finelawn Lawn Food Formula 22-35X Lawn Fertilizer Godfrey's Professional Lightweight Turf Food Gold Seal Lawn Food Grand Union Brand Lightweight Lawn Fertilizer Greenfield Broadleaf Weed Killer & Measured- Release Lawn Food Greenfield Measured-Release Lawn Food Hart's Turf Food                                                                   |
| 5269<br>5331/<br>5555/<br>4926<br>4882<br>5845/                                                  | 20-10- 5<br>20-10- 5<br>20-10- 5<br>20-10- 5<br>20-10- 5<br>20-10- 5                                       | Holdridge Turf Food Holiday Weed & Feed Homestead Custom Lawn Food Hubbard-Hall Blade Lawn Food Kentucky Turf Lawn Food Kentucky Valley's Lightweight Fertilizer for Turf                                                                                                                                                                                                                    |
| 5841/<br>5330/<br>5770/<br>5474<br>5811<br>5480<br>5506/<br>4869/<br>5507                        | 20-10- 5<br>20-10- 5<br>20-10- 5<br>20-10- 5<br>20-10- 5<br>20-10- 5<br>20-10- 5<br>20-10- 5               | Kentucky Valley's Weed & Feed Lawn Aide Lawn Fertilizer Lawn Time Lightweight Lawn Food Loft's Lightweight Fertilizer for Turf Loft's Weed & Feed McArdle's Turf Food Mr. Turf's Lawn Fertilizer Mr. Turf's Weed & Feed Plantation Lawn Food                                                                                                                                                 |

<sup>\*</sup> Small package sample.

#### Commercial Fertilizers

TABLE 5.
ANALYSES OF MIXED FERTILIZERS

|            |                |                |                       | MIXED FERT              |                   |             |
|------------|----------------|----------------|-----------------------|-------------------------|-------------------|-------------|
| Mfr.       |                | cent           | Per cent              | Per cent                | Per cent          | Per cent    |
| No.        |                | anic<br>ogen   | total<br>nitrogen     | available<br>phosphoric | water-<br>soluble | magnesium   |
| 1,0,       | Sol.           | Insol.         | 08011                 | acid                    | potash            | magnosium   |
|            |                |                |                       |                         |                   | <del></del> |
|            |                |                |                       |                         |                   |             |
| 135        | 0.40           | 0.20           | 6.28                  | 2287                    | 4.40              |             |
| 135<br>135 | 0.32           | 0.16<br>0.22   | 6.28<br>6.08          | 10.12                   | 4.41              | • • • •     |
| 65         | 0.56           | 0.14           | 6.16                  | 9.87<br>9.92            | 4.54<br>4.11      | • • • •     |
|            |                |                |                       | , , ,                   |                   |             |
|            |                |                |                       |                         |                   |             |
| 42         | 14.56          | 0.24           | 17.52                 | 8.56                    | 4.37              |             |
| 135        | 9.36           | 5.00           | 16.36                 | 8.11                    | 4.11              | • • • •     |
| 135<br>1   | 9.44<br>15.20  | 5. 12<br>0. 16 | 16.56<br>20.32        | 7.60<br>2.60            | 4.45<br>7.18      | • • • •     |
| 11         | 16.80          | 0. 24          | 21.92                 | 10.00                   | 6.02              | • • • •     |
| 13         | 9.44           | 1.12           | 16.80                 | 10.15                   | 5.40              |             |
| 23         | 12.84          | 4.44           | 22.08                 | 2.64                    | 5.67              |             |
| 24<br>24   | 9.44<br>13.40  | 4.48<br>0.20   | 19.20<br>20.48        | 11.46<br>10.32          | 5.02<br>5.30      | • • • •     |
| 103        | 11.68          | 0.16           | 17.92                 | 11.08                   | 5.28              | • • • •     |
| 77         | 15.68          | 0.00           | 20.16                 | 9.00                    | 5.48              |             |
| 51<br>51   | 12.16<br>14.14 | 0.52           | $\frac{18.12}{19.76}$ | 10.50<br>10.06          | 5.36<br>5.02      | • • • •     |
| 18         | 8.16           | 3. 28          | 18.08                 | 9.45                    | 5.71              |             |
| 38         | 12.48          | 1.48           | 20.32                 | 9.90                    | 5.06              |             |
| 60         | 4.16           | 4.80           | 13.36                 | 10.30                   | 5.35              | • • • •     |
| 8<br>65    | 12.48<br>4.32  | 0.32<br>3.68   | 19.68<br>18.08        | 11.12<br>12.02          | 5.24<br>5.03      | • • • •     |
| 03         |                | 3.00           | *****                 | 12.02                   | 3.03              | ••••        |
| 42         | 12.96          | 1.96           | 19.72                 | 10.65                   | 6.78              |             |
| 42<br>71   | 12.32<br>11.04 | 2.36<br>4.52   | 20.12<br>20.84        | 11.39<br>11.27          | 6.80<br>6.42      | • • • •     |
| 76         | 8.64           | 2.12           | 17.76                 | 7.69                    | 5.64              | • • • •     |
| 86         | 12.32          | 0.00           | 20.48                 | 11.67                   | 5.28              |             |
| 6          | 10.24          | 5.28           | 20.48                 | , <u>8, 56</u>          | 6.30              | • • • •     |
| 78<br>8    | 11.68<br>13.54 | 5.12<br>0.28   | 21.76<br>20.32        | 11.30<br>10.48          | 6.17<br>7.05      | • • • •     |
| Ü          | 10,01          | 0,20           |                       |                         |                   | • • • •     |
| 85         | 10.28          | 0.12           | 15.36                 | 8.86                    | 5.38              | • • • •     |
| 85<br>86   | 12.00<br>15.72 | 0.28<br>0.12   | 19,52<br>20,96        | 9.32<br>11.57           | 5.87<br>5.02      | • • • •     |
| 77         | 14.88          | 0.12           | 20.08                 | 14.06                   | 4.98              | • • • •     |
| 91         | 14.56          | 0.16           | 20.80                 | 10.48                   | 5.56              |             |
| 91<br>93   | 14.22<br>13.72 | 0.64<br>0.36   | 18.88                 | 10.70                   | 5.47              | • • • •     |
| 99         | 15. 16         | 0.30           | 20.32<br>20.32        | 9.56<br>10.39           | 5.85<br>7.68      |             |
| 99         | 15.84          | 0.20           | 20.96                 | 10.42                   | 5.38              |             |
| 18         | 8.56           | 3.40           | 18.56                 | 2.66                    | 6.75              | • • • •     |

|                |          | TODO OT WITTED TERRITORIS                   |
|----------------|----------|---------------------------------------------|
| Station<br>No. |          | Ratio, grade and brand                      |
| 5189           | 20-10- 5 | Seaboard Lawn Builder                       |
| 5254           | 20-10- 5 | Sears Green Karpet Lawn Food                |
| 5360           | 20-10- 5 | Society Hill Lawn Builder                   |
| 5168           | 20-10- 5 | Suburban Pride Complete Lightweight Lawn    |
| 3100           | 20-10- 3 | Food                                        |
| 5370/          | 20-10- 5 | Supre-Macy Turf Food                        |
| 5805/          | 20-10- 5 | Turf Master Emerald                         |
| 5849           | 20-10- 5 | Western Auto Revelation Lawn Fertilizer     |
| 5848           | 20-10- 5 | WA Revelation Weed & Feed with 2,4-D        |
| 3040           | 20-10- 3 | WA Revelation weed & Feed with 2, 4-D       |
|                | 4-3-1    |                                             |
| -/             |          |                                             |
| 5699           | 8- 6- 2  | Corenco Landscape (40% of Nit. is Org.)     |
| 5146           | 8- 6- 2  | Old Fox No Pest Turf Food                   |
| 5223           | 8- 6- 2  | Old Fox Turf Food                           |
| 5216           | 8- 6- 2  | Old Fox Turf Food & Crabgrass Control       |
| 4958           | 8- 6- 2  | Yale Special Mixture                        |
|                | 4 2 2    |                                             |
|                | 4- 3- 2  |                                             |
| 5030           | 8-6-4    | Corenco Turf Green                          |
| 5463           | 8- 6- 4  | Corenco Turf Green                          |
| 5237           | 8- 6- 4  | Corenco Turf Green with Chlordane           |
| 5144           | 8-6-4    | Green Leaf Fertilizer                       |
| 5720           | 8-6-4    | Guardian Gro-Green Lawn Fertilizer          |
| 5931           | 8-6-4    | Lawncraft Turf Food (50% Organic)           |
| 5937           | 8-6-4    | Lawncraft Turf Food Fish Base (50% Org.)    |
| 5177           | 8- 6- 4  | Squire Applegate Special Weed 'N Green      |
|                |          | Turfood & Weed Control & Chickweed Killer   |
| 4820           | 8-6-4    | Squire Applegate Turfood & Crabgrass Killer |
| 5126           | 8-6-4    | Squire Applegate Weed 'N Green Turfood &    |
|                |          | Weed Control                                |
| 5767*          | 12- 9- 6 | Scope Systemic 2 in 1 Rose Care             |
|                |          |                                             |
|                | 4- 6- 3  |                                             |
| 5356*          | 8-12- 6  | Emerald Green Plant Food                    |
| 5462/          | 8-12- 6  | Emerald Green Plant Food                    |
| 5264*          | 8-12- 6  | Pink Vigoro                                 |
| 5946           | 8-12- 6  | Pink Vigoro                                 |
|                |          |                                             |
|                | 5- 2- 1  |                                             |
| 4848           | 25-10- 5 | Sears Superfine Lawn Food                   |
| 5156           | 25-10- 5 | Woodruff's Tuf Turf Food                    |
| 3130           | 23-10- 3 | Woodfull S ful full full Food               |
|                |          |                                             |

<sup>\*</sup> Small package sample.

TABLE 5.
ANALYSES OF MIXED FERTILIZERS

|            | ANALYSES OF MIXED FERTILIZERS |                |                   |                       |                    |           |
|------------|-------------------------------|----------------|-------------------|-----------------------|--------------------|-----------|
| Mfr.       | Per<br>org                    | cent<br>anic   | Per cent<br>total | Per cent<br>available | Per cent<br>water- | Per cent  |
| No.        | nitr<br>Sol.                  | ogen<br>Insol. | nitrogen          | phosphoric<br>acid    | soluble<br>potash  | magnesium |
| 73<br>124  | 16.48<br>16.52                | 0.20<br>0.12   | 20.36<br>20.32    | 10.44<br>12.46        | 8.06<br>5.31       | • • • •   |
| 73         | 17.88                         | 0.20           | 21. 76            | 10.09                 | 6.50               | ••••      |
| 77<br>95   | 17.00<br>14.80                | 0.12<br>0.94   | 21.76<br>20.96    | 9.78<br>8.53          | 5.05<br>5.76       | • • • •   |
| 110<br>145 | 12.52<br>15.20                | 0.28           | 19.68<br>20.48    | 10.06<br>10.18        | 5.35<br>5.31       | • • • •   |
| 145        | 17.24                         | 0.20           | 21.28             | 10.12                 | 5.29               | •••       |
| 34         | 2.40                          | 0.58           | 8.02              | 6.22                  | 2.42               | • • • •   |
| 104<br>104 | 2.18<br>0.32                  | 1.58<br>1.28   | 8.08<br>7.36      | 5.90<br>5.70          | 2.51<br>2.38       |           |
| 104<br>2   | 0.44                          | 2.12           | 8.00<br>8.44      | 5,54<br>6,63          | 2.98<br>2.67       | • • • •   |
| _          | 2.02                          | 1. 70          | 0.11              | 0.03                  | 2.01               | • • •     |
| 34<br>34   | 1.22<br>0.92                  | 2.66<br>2.56   | 8.44<br>9.16      | 6.71<br>5.78          | 4.22<br>1.22       | • • • •   |
| 34<br>104  | 1.22                          | 2.34           | 8.36<br>8.08      | 5.66<br>6.76          | 4.34<br>4.04       | • • • •   |
| 1          | 1.02                          | 0.26           | 8.80              | 5,65                  | 4.43               | • • • •   |
| 78<br>78   | 2.12                          | 1.20<br>1.82   | 8.04<br>8.80      | 6.54<br>6.12          | 4.13<br>4.10       | • • • •   |
| 3          | 0.32<br>0.48                  | 0.00<br>0.18   | 8.16<br>8.20      | 6.93<br>6.17          | 5.64<br>4.43       | • • • •   |
| 3          | 0.56                          | 0.00           | 8.36              | 6.54                  | 4.23               | • • • •   |
| 28         | 7.04                          | 0.00           | 12.48             | 10.00                 | 6.51               | • • • •   |
| 54         | 0.96                          | 0.38           | 8.30              | 13.06                 | 6.55               |           |
| 54<br>135  | 0.20<br>0.56                  | 0.88           | 8.84<br>8.52      | 10.32<br>12.76        | 6.77<br>6.80       | • • • •   |
| 135        | 0.24                          | 0.16           | 8.00              | 12.04                 | 7.27               | • • • •   |
| 124        | 10, 56                        | 10.56          | 25,12             | 10.09                 | 5.43               |           |
| 148        |                               | 10.04          | 24.64             | 2.00                  | 6.35               | • • • •   |
|            |                               |                |                   |                       |                    |           |

| Station<br>No.     |          | Ratio, grade and brand                                                                     |
|--------------------|----------|--------------------------------------------------------------------------------------------|
|                    | 5- 3- 2  |                                                                                            |
| 5209 <sup>1</sup>  | 10-6-4   | AA Plant Food                                                                              |
| 5258               | 10- 6- 4 | AA Plant Food                                                                              |
| 5871               | 10- 6- 4 | AA Plant Food                                                                              |
| 5482               | 10-6-4   | Agrico 1-2-3                                                                               |
| 5802               | 10-6-4   | Agrico Country Club Fertilizer                                                             |
| 5750               | 10-6-4   | Agrico Grass Food                                                                          |
| 5803               | 10-6-4   | Agrico Insect Control with Fertilizer                                                      |
| 5273               | 10- 6- 4 | Agrico for Lawns, Trees & Shrubs                                                           |
| 5276               | 10- 6- 4 | Agrico Weed Control with Fertilizer                                                        |
| 5281 <sup>1</sup>  | 10-6-4   | Agway Fertilizer from 60% Organic                                                          |
| 4932               | 10- 6- 4 | Armour Lawn Special                                                                        |
| 5824/              | 10- 6- 4 | Armour Vertagreen Double Duty Lawn                                                         |
| 4931/              | 10- 6- 4 | Treatment with 2, 4-D                                                                      |
| 5822               | 10- 6- 4 | Armour Vertagreen Triple Duty Lawn Treatment<br>Armour Vertagreen for Turf (60% Organic N) |
| 5823               | 10- 6- 4 | Armour Vertagreen Turf Food w. Chlordane                                                   |
| 4951 <sup>30</sup> |          | Armour Vertagreen Turf & Tree Fertilizer                                                   |
| 4856               | 10- 6- 4 | Asgrow 3-Way Lawn Food with Bandane                                                        |
| 5829               | 10- 6- 4 | Asgrow Lawn Food                                                                           |
| 4959               | 10- 6- 4 | C & J Hi Organic Fertilizer                                                                |
| 5878               | 10- 6- 4 | Cascio's High Organic Lawn Food                                                            |
| 5175               | 10-6-4   | Conn. Nurserymen's Ass'n. 3 in 1 Crabgrass                                                 |
|                    |          | Preventer with Dacthal & Heptachlor                                                        |
| 4879               | 10-6-4   | Corenco Golf & Lawn Special                                                                |
| 4956 <sup>1</sup>  | 10-6-4   | Corenco Golf & Lawn Special                                                                |
| 5021 <sup>1</sup>  | 10- 6- 4 | Corenco Golf & Lawn Special                                                                |
| 4966               | 10- 6- 4 | Corenco Golf & Lawn Special-Crabgrass Control                                              |
| 5014 <sup>1</sup>  | 10-6-4   | Corenco Fertilizer (50% Nit. is Organic)                                                   |
| 5343               | 10- 6- 4 | Corenco Fertilizer (50% Nit. is Organic)                                                   |
| 5700               | 10- 6- 4 | Corenco Pro-Grass                                                                          |
| 4973               | 10-6-4   | Country Club Lawn Food                                                                     |
| 5352               | 10- 6- 4 | Danbury Garden Center Lawn & Tree Food                                                     |
| 5695/              | 10-6-4   | Davco 3-G Granulated Fertilizer                                                            |
| 4914               | 10-6-4   | Deerfield Lawn Food                                                                        |
| 5712               | 10-6-4   | Eastern States Lawn Special with 2.4 Mg                                                    |
| 5261/              | 10-6-4   | EnVee Weed & Feed                                                                          |
| 4909               | 10-6-4   | Espoma Turf Tone                                                                           |
| 5215/              | 10-6-4   | Estate Green Fertilizer                                                                    |
| 5556/              | 10-6-4   | Ezzell's Verdo Lawn Food (60% Nit. is Org.)                                                |
| 5204/              | 10-6-4   | Farmingdale 3 in 1 Triple Action                                                           |
| 5590               | 10- 6- 4 | Federal Lawn Life Plant Food Special "75"                                                  |
| 5589               | 10- 6- 4 | Federal Lawn Life Plant Food Premium"150"                                                  |
| 5151               | 10- 6- 4 | Finelawn 3 in 1 Lawn Food                                                                  |

<sup>\*</sup> Small package sample. / Unregistered.

<sup>30</sup> Iron: Guaranteed, 0.10%; found, 2.71%.

TABLE 5. ANALYSES OF MIXED FERTILIZERS

| Mfr. | Per  | cent   | Per cent | Per cent   | Per cent | Per cent  |
|------|------|--------|----------|------------|----------|-----------|
| -    |      | anic   | total    | available  | water-   |           |
| NT - | _    |        |          |            |          |           |
| No.  |      | ogen   | nitrogen | phosphoric | soluble  | magnesium |
|      | Sol. | Insol. |          | acid       | potash   |           |
|      |      |        |          |            |          |           |
|      |      |        |          |            |          |           |
|      |      |        |          |            |          |           |
| 6    | 0.32 | 0.08   | 10.16    | 6.07       | 4.55     |           |
| 6    | 2.00 | 0.14   | 9.68     | 6.69       | 4.54     |           |
| 6    |      |        | 10.32    |            |          | • • • •   |
|      | 0.40 | 0.00   |          | 5.84       | 4.04     | • • • •   |
| 6    | 2.74 | 3.58   | 11.36    | 6.72       | 4.92     |           |
| 6    | 3.18 | 2.10   | 10.32    | 6.04       | 4.27     |           |
| 6    | 0.52 | 3.64   | 10.40    | 6.30       | 4.68     |           |
| 6    | 4.68 | 0.28   | 10.48    | 6.03       | 4.22     |           |
| 6    | 4.56 | 0.40   | 10.24    | 6.03       | 4.14     | ****      |
|      |      |        |          |            |          | • • • •   |
| 6    | 4.56 | 0.48   | 10.32    | 6.01       | 4.37     | • • • •   |
| 3    | 1.76 | 4.20   | 10.24    | 6.44       | 4.53     |           |
| 11   | 0.72 | 0.18   | 10.42    | 6.41       | 4.17     |           |
|      |      |        |          |            |          |           |
| 11   | 9.28 | 0.40   | 11.52    | 5.54       | 4.06     |           |
|      |      |        |          | 8.64       | 8.05     | • • • •   |
| 11   | 9.92 | 0.16   | 12.96    |            |          | • • • •   |
| 11   | 1.44 | 3.66   | 9.12     | 7.64       | 4.35     |           |
| 11   | 0.24 | 1.48   | 10.00    | 6.02       | 4.05     |           |
| 11   | 1.16 | 1.56   | 8.48     | 6.46       | 5.56     |           |
| 12   | 6.00 | 0.22   | 9.82     | 5.99       | 2.82     |           |
| 12   | 0.16 | 0.00   | 10.40    | 6.07       | 4.14     | • • • •   |
|      |      |        |          |            |          |           |
| 24   | 6.24 | 0.82   | 14.00    | 6.22       | 4.02     |           |
| 27   | 2.26 | 3.58   | 10.00    | 6.51       | 4.09     |           |
|      |      |        |          |            |          |           |
| 24   | 3.20 | 0.40   | 6.00     | 6.73       | 3.31     |           |
| 34   | 3.82 | 1.06   | 10.08    | 6.23       | 4.24     | * * * *   |
| 34   | -    | -      | 10.00    | 6.13       | 4.31     | • • • •   |
|      | 3.84 | 0.90   |          |            |          | • • • •   |
| 34   | 3.20 | 1.80   | 9.32     | 7.97       | 4.11     |           |
|      |      |        |          |            |          |           |
| 34   | 3.36 | 1.34   | 8.16     | 6.04       | 4.04     |           |
| 34   | 1.36 | 3.76   | 10.08    | 6.56       | 4.34     |           |
| 34   | 3.12 | 1.54   | 10.00    | 6.30       | 4.09     | • • • •   |
|      | _    |        |          |            |          | • • • •   |
| 34   | 0.72 | 4.22   | 8.64     | 6.92       | 4.27     | • • • •   |
| 89   | 0.00 | 1.80   | 10.08    | 6.03       | 4.40     |           |
| 36   | 4.02 | 1.34   | 10.00    | 7.04       | 4.24     |           |
| 63   | 0.72 | 0.00   | 10.00    | 6.63       | 4.36     |           |
| 103  | 1.60 | 1.08   | 10.16    | 6.42       | 4.58     |           |
|      |      |        |          |            |          |           |
| 3    | 1.76 | 2.22   | 10.00    | 5.82       | 4.37     | 3.96      |
| 77   | 1.52 | 0.00   | 10.88    | 7. 92      | 4.00     |           |
| 44   | 1.92 | 2.52   | 11.28    | 6.28       | 4.68     |           |
| 45   | 0.40 | 0.08   | 10.64    | 5.92       | 5.01     |           |
| 47   | 2.64 | 1.86   | 9.12     | 7.10       | 5.96     |           |
| 51   | 7.92 | 0.28   | 13.68    | 6.52       | 5.39     |           |
|      |      |        | 11.20    |            |          |           |
| 53   | 4.32 | 0.84   | 11.20    | 6.95       | 4.27     | • • • •   |
| 53   | 3.36 | 1.28   | 10.64    | 6.64       | 4.38     |           |
| 18   | 5.48 | 1.64   | 10.24    | 6.14       | 4.02     |           |
|      |      |        |          |            |          |           |

..... Indicates deficiencies. 

1 State purchase.

## TABLE 5.

## ANALYSES OF MIXED FERTILIZERS

| Station No.                                                                                                                                                                              |                                                                                                                                                                                                                                                                                  | Ratio, grade and brand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5149/<br>5150/<br>5152/<br>4881<br>5958<br>5487/<br>5749/<br>5348<br>5378<br>5642/<br>5123<br>4961<br>5641<br>5615<br>5354<br>5354<br>5378<br>5167<br>5554                               | 10- 6- 4<br>10- 6- 4 | Finelawn (25% Nit. is Org.) Finelawn Weed & Feed Lawn Foodw. 2,4-D Garden Exchange Inc. Lawn Food Glen Terrace Lawn Food G & O Hyganic Lawn Food G & O Lawn, Tree & Shrub Food (35% Org. Nit) G & O Turf Food & Insecticide w. Chlordane Grand Union Brand Lawn & Garden Fertilizer Greenlife Turf & Tree Food Green Ribbon Formula 25 Lawn Food Green Ribbon Lawn Food Gro Fast Lawn Food Hart's Crabgrass Killer & Lawn Fertilizer Hart's Lawn Food Hart's Two for One Heritage House Three In One Hess Quality Approved Lawn Master Turf Food Holiday New 3-Way Lawn Treat Homestead Farm Style Fertilizer Homestead Weed & Feed Fertilizer Hubbard-Hall 3-Way Turf 'N Tree Food                                            |
| 4983<br>4828<br>5373<br>5393<br>5593<br>54591<br>6101<br>5020<br>6102<br>6102<br>5510<br>6104<br>5840<br>5842<br>5270<br>4979/<br>4855<br>5502<br>5479<br>4854/1<br>5185<br>5347<br>5645 | 10- 6- 4<br>10- 6- 4                                                             | Hubbard-Hall Turf 'N Tree Food HH Turf 'N Tree Food with Insect Control HH 50% Natural Organic WION HH 50% Natural Organic WION Just Right Turf Food Lawn Craft Turf Food Lawn Craft Turf Fertilizer (50% Nit. is Org.) Lawn Craft Turf Fertilizer (50% Nit. is Org.) Lawn Craft (50% Nit. is Organic) Lawn Craft (50% Nit. is Organic) Lawn Craft Turf Food 50% Org. Roto Blend Lawn Craft (50% Nit. is Organic) Lawn Master Turf Food Lawn Master Turf Food Lawn Master Turf Food Lawn Master Turf Food 100% Organic Liberty Fertilizer Liberty Lawn Food Luzerne Lawn Food Loft's for Turf McArdle's Lawn & Tree Food Old Fox Fertilizer Patco Chek Azak plus Chlordane Patco Sod Maker Perk-Up Lawn Food Perk-Up Lawn Food |

<sup>\*</sup> Small package sample.

<sup>/</sup> Unregistered.

TABLE 5.
ANALYSES OF MIXED FERTILIZERS

|         |       | ANA     | LYSES OF 1 | MIXED FERT    | ILIZERS  |            |
|---------|-------|---------|------------|---------------|----------|------------|
| Mfr.    | Per   | cent    | Per cent   | Per cent      | Per cent | Per cent   |
| 14111 . |       | anic    | total      | available     | water-   | 1 CI COIII |
| No.     |       | ogen    | nitrogen   | phosphoric    | soluble  | magnesium  |
| 140.    | _     | Insol.  | mitt og on | acid          | potash   | magnosiam  |
|         | 501.  | 111501. |            | acra          | Potabii  |            |
| 18      | 1.76  | 1.04    | 10.24      | 6.38          | 3.72     |            |
| 18      | 3.74  | 0.42    | 10.24      | 6.02          | 4.08     |            |
| 19      | 3.54  | 1.42    | 9.68       | 6.69          | 4.19     | • • • •    |
| 19      | 4.28  | 1.40    | 10.08      | 6.08          | 4.28     |            |
| 62      | 0.34  | 2.70    | 10.88      | 5.84          | 4.95     |            |
| 62      | 1.20  | 2.48    | 10.00      | 6.32          | 4.61     |            |
| 62      | 1.76  | 1.14    | 8.64       | 7.86          | 4.67     |            |
| 65      | 0.72  | 1.64    | 9,20       | 6.11          | 4.46     |            |
| 66      | 7.96  | 1.16    | 10.88      | 5.88          | 4.10     |            |
| 67      | 1.44  | 0.24    | 9.60       | 6.93          | 4.45     |            |
| 67      |       | 0.82    | 10.08      | 6.61          | 4.94     |            |
| 68      | 1.28  | 0.14    | 10.38      | 6.32          | 4.41     |            |
| 71      | 5.34  | 0.50    | 9.76       | 6.53          | 4.49     |            |
| 71      | 4.88  | 1.02    | 11.04      | 6.72          | 4.15     |            |
| 71      | 7.04  | 0.24    | 10.72      | 7.11          | 4.90     |            |
| 73      | 8.96  | 0.78    | 12,00      | 5.71          | 4.32     |            |
| 53      | 0.32  | 0.00    | 11.04      | ŝ <u>.</u> 8î | 4.11     |            |
| 86      | 7.60  | 0.10    | 9.76       | 5. 76         | 5.49     |            |
| 6       | 0.24  | 0.00    | 10.24      | 5.89          | 4.02     |            |
| 6       | 4.28  | 0.68    | 10.64      | 6.73          | 4.04     |            |
| 78      | 2.32  | 2.84    | 10.40      | 6.81          | 5.14     |            |
| 78      | 1.98  | 3.22    | 9.44       | 6.72          | 5.29     |            |
| 78      | 3.04  | 3.84    | 11.28      | 6.67          | 4.43     | • • • •    |
| 78      | 0.00  | 4.86    | 11.02      | 8.83          | 3,52     |            |
| 78      | 0.96  | 5.04    | 10.48      | 5.87          | 4.32     |            |
| 69      | 0.80  | 3.60    | 10.64      | 6.23          | 4.15     |            |
| 78      | 2.00  | 0.00    | 10.08      | 5.98          | 4.14     |            |
| 78      | 1.28  | 5.44    | 11.52      | 6.20          | 4.25     |            |
| 78      | 5.92  | 2.72    | 10.56      | 6.98          | 4.60     |            |
| 78      | 0.80  | 5,58    | 11.20      | 6.10          | 4.17     |            |
| 78      | 4.16  | 5,52    | 10.64      | 5.69          | 4.55     |            |
| 78      | 3.68  | 2.14    | 10.00      | 6.19          | 4.10.    |            |
| 78      | 1.12  | 5.28    | 11.28      | 6.98          | 4.55     |            |
| 53      | 0.56  | 0.24    | 10.56      | 5.80          | 4.02     |            |
| 53      | 4.00  | 2.18    | 8.64       | 7.37          | 4.12     | • • • •    |
| 78      | 1.04  | 0.10    | 10.58      | 6.22          | 4.02     |            |
| 78      | 1.12  | 1.48    | 10.00      | 6.52          | 5.94     | • • • •    |
| 92      | 0.48  | 0.00    | 2.20       | 6.31          | 4.66     |            |
| 91      | 3.50  | 2.58    | 10.08      | 5.94          | 4.85     |            |
| 93      | 3.68  | 1.30    | 8.40       | 7. 33         | 4.45     |            |
| 104     | 0.48  | 0.00    | 10.00      | 6.32          | 4.72     | • • • •    |
| 108     | 5, 28 | 0. 38   | 10.06      | 6,61          | 4.46     | • • • •    |
| 108     | 3.22  | 4.06    | 10.48      | 6.22          | 4.38     | • • • •    |
| 111     | 1.92  | 0.12    | 10.00      | 6. 16         | 4.17     | • • • •    |
| 111     | 3.20  | 1.48    | 2.64       | 5.83          | 4.08     | • • • •    |

<sup>~</sup> Indicates deficiencies.

<sup>1</sup> State purchase.

### TABLE 5.

## ANALYSES OF MIXED FERTILIZERS

| Station<br>No.                                                                                |                                                                                                                                  | Ratio, grade and brand                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5259/<br>5351/<br>4876<br>5350/<br>5743<br>4846<br>5257*<br>5300                              | 10- 6- 4<br>10- 6- 4<br>10- 6- 4<br>10- 6- 4<br>10- 6- 4<br>10- 6- 4<br>10- 6- 4                                                 | Perk-Up Special Lawn Food (25% Org. Nit.) Plantation Crabgrass Preventer & Lawn Food Plantation Quality Fertilizer Plantation Weed Killer & Lawn Food Renzulli Bros. Lawn Food Sears Crabgrass Killer & Fertilizer Sears Evergreen Food Sears Hi-Organic Lawn Food                                                                                                                |
| 5301<br>5374<br>5377*<br>4822 <sup>31</sup><br>5120/ <sup>1</sup><br>5460/<br>5169/<br>5170   | 10-6-4<br>10-6-4<br>10-6-4<br>10-6-4<br>10-6-4<br>10-6-4<br>10-6-4                                                               | Sears Plant Food Sears Plant Food Sears Plant Food Squire Applegate High Organic Nitrogen State of Conn. (25% Synt.Organic O WION) State of Conn. (25% Synt.Organic O WION) Suburban Pride Lawn Food with Weed Killer                                                                                                                                                             |
| 5116/<br>4883<br>5742/<br>5520<br>5945<br>5016<br>5833<br>5832<br>5837/ <sup>32</sup><br>4827 | 10- 6- 4<br>10- 6- 4<br>10- 6- 4<br>10- 6- 4<br>10- 6- 4<br>10- 6- 4<br>10- 6- 4                                                 | Suburban Pride Triple Action Crabgrass Killer plus Lawn Food Insecticide Super Spur Lawn Food Super Turf King Lawn Food Valu-Gro Vigoro Turf Food for Professionals w. 1.8 Mg Vitogro Triple-Acting Crabgrass Control Weed & Feed with 2, 4-D Wonderlawn Lawn Food with 3.0 Mg Wonderlawn All-In-One (100% Org. Nit.) Wonderlawn Lawn Food w. Org. Nit. Woodruff's Turf Turf Food |
| 5573<br>5830<br>5592<br>5723<br>5018<br>5933<br>5843/<br>5525<br>4845<br>5256<br>5253         | 5- 4- 0<br>5- 4- 0 | Fer Mel Fairway Turf Food  Breck's Greenite Hart's All-Organic Plant Food Hubbard-Hall Nitroganic with 2, 4-D & Silvex Lawn Craft VFT Turf Food Lawn Master All Organic Plant Food Lebanon Turf Organic Sears All Organic Lawn Food Sears Crabgrass Plant Killer in Organic Food Sears Weed Killer in Organic Lawn Food                                                           |

<sup>\*</sup> Small package sample.

<sup>/</sup> Unregistered.

<sup>31</sup> Boron: Guaranteed, 0.02%; found, 0.00%.

TABLE 5.
ANALYSES OF MIXED FERTILIZERS

|            |              | ANA          | LYSES OF I     | MIXED FERT           | ILIZERS      |           |
|------------|--------------|--------------|----------------|----------------------|--------------|-----------|
| Mfr.       | Per          | cent         | Per cent       | Per cent             | Per cent     | Per cent  |
|            | org          | anic         | total          | available            | water-       |           |
| No.        | nitr         | ogen         | nitrogen       | phosphoric           | soluble      | magnesium |
|            | Sol.         | Insol.       |                | acid                 | potash       |           |
|            |              |              |                |                      |              |           |
| 111        | 3.04         | 0.24         | 10.16          | 7.05                 | 5.70         | • • • •   |
| 18         | 6.30         | 1.62         | 11.04          | 5.90                 | 4.24         | • • • •   |
| 18         | 1.92         | 0.00         | 2.36           | 6.42                 | 5.50         | • • • •   |
| 18         | 2.40         | 0.00         | 10.40          | 5.62                 | 4.14         | • • • •   |
| 119        | 0.48         | 2.22         | 10.06          | 6.20                 | 4.14         | • • • •   |
| 124<br>124 | 5.12<br>4.00 | 0.30<br>1.66 | 9.82<br>10.08  | 7.55<br>6.93         | 7.11<br>4.04 | • • • •   |
| 124        | 3.90         | 1.46         | 9.68           | 6.00                 | 4.04         | • • • •   |
| 124        | 1.50         | 0.96         | 10.00          | 6.41                 | 4.05         | • • • •   |
| 124        | 2.07         | 0.37         | 9.80           | 6.79                 | 5.03         | • • • •   |
| 124        | 4.10         | 1.50         | 10.00          | 6.87                 | 5.11         | • • • •   |
| 3          | 0.80         | 1.86         | 10.00          | 5.93                 | 4.63         | • • • •   |
| 78         | 2.64         | 0.12         | 10.40          | 6.59                 | 5.14         | • • •     |
| 78         | 2.56         | 0.00         | 10.40          | 6.00                 | 5.28         |           |
| 73         | 1.76         | 0.10         | 10.50          | 5.37                 | 4.30         |           |
| , -        |              |              |                | ****                 |              |           |
| 73         | 3.03         | 1.74         | 10.88          | 6.71                 | 4.79         |           |
| 1          | 0.36         | 0.20         | 11.12          | 5.55<br>5.57<br>6.10 | 4.99         |           |
| 1          | 0.44         | 0.28         | 11.28          | 5,57                 | 4.73         |           |
| 141        | 0.64         | 0.22         | 10.00          | 6.10                 | 4.25         |           |
| 135        | 0.88         | 1.06         | 10.32          | 6.88                 | 4.45         | 1.73      |
| 135        | 6.08         | 3.58         | 10.88          | 4.67                 | 6.53         |           |
| 73         | 5.82         | 0.90         | 11.76          | 6.95                 | 5.44         |           |
| 146        | 0.64         | 2.78         | 10.08          | 6.45                 | 4. 28        | 3.52      |
| 146        | 2.56         | 2.92         | 2.76           | 4.47                 | 5.35         | • • • •   |
| 146        | 1.76         | 2.30         | , <u>8, 88</u> | 5.80                 | 6.39         | • • • •   |
| 148        | 4.32         | 0.85         | 10.32          | 5.89                 | 4.61         | • • • •   |
| 97         | 11.68        | 1.00         | 20.20          | 11.84                | 8.69         | • • • •   |
|            |              |              |                |                      |              |           |
|            |              |              |                |                      |              |           |
| 12         | 0.28         | 5.12         | 5.40           | 6.45                 |              |           |
| 71         | 0.32         | 5.06         | 5.48           | 6.23                 |              |           |
| 78         | 0.42         | 4.40         | 5.54           | 6.41                 | • • • •      |           |
| 78         | 0.54         | 4.50.        | 5.20           | 4.27                 | • • • •      | • • • •   |
| 78         | 0.28         | 5.08         | 5.68           | 4.89                 | • • • •      | • • • •   |
| 53         | 1.04         | 4.20         | 5.80           | 5.89                 | • • • •      | • • • •   |
| 88         | 0.58         | 4.82         | 5.56           | 6.48                 | • • • •      | • • • •   |
| 124<br>124 | 0.78         | 4.70<br>4.38 | 5.64           | 6.31                 | • • • •      | • • • •   |
| 124        | 0.70         | 4.38         | 5.40<br>5.16   | 5.28<br>6.24         | • • • •      | • • • •   |
| 144        | 0.50         | 4.00         | 5, 10          | 0, 24                | • • • •      | ••••      |

Indicates deficiencies. 1 State purchase.

Boron: Guaranteed, 0.0575%; found, 0.00%. Zinc: Guaranteed, 0.033%; found, 0.00%. Iron: Guaranteed, 0.031%; found, 0.30%.

TABLE 5.

## ANALYSES OF MIXED FERTILIZERS

| Station No.                                                                                                                                                               |                                                                                                                                   | Ratio, grade and brand                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5388*<br>5335*<br>5327/<br>5663                                                                                                                                           | 7-10- 5<br>7-10- 5<br>7-10- 5<br>7-10- 5<br>7-10- 5                                                                               | Emerald Green Rose Food<br>Finelawn Rose Food<br>Finelawn Rose Food<br>Hubbard-Hall Rose Food                                                                                                                                                                                                                                                                                                                                                                                           |
| 5461 /<br>4987<br>5503<br>5017                                                                                                                                            | 12- 5- 7<br>12- 5- 7<br>12- 5- 7<br>12- 5- 7<br>12- 5- 7                                                                          | Emerald Green Lawn Food<br>Golden Vigoro<br>Golden Vigoro Lawn Food with End-O-Pest<br>Vigoro Lawn Weeder & Feeder                                                                                                                                                                                                                                                                                                                                                                      |
| 5765/<br>5722<br>5954<br>5153<br>5458/<br>5361                                                                                                                            | 17- 4- 4<br>17- 4- 4<br>17- 4- 4<br>17- 4- 4<br>17- 4- 4<br>17- 4- 4                                                              | Adams Nursery Mart Weed & Feed Granules<br>Asgrow Weed Nix Lawn Food w. 2,4-D & Silvex<br>Asgrow Weed Nix Lawn Food w. 2,4-D & Silvex<br>Garden Exchange Inc., Weed & Feed Granules<br>Glen Terrace Nurseries Weed & Feed Granules<br>Platt's Weed & Feed Granules                                                                                                                                                                                                                      |
|                                                                                                                                                                           | Miscellane                                                                                                                        | ous Ratios                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 5271/<br>5852<br>5808<br>5847<br>5500<br>5465<br>5488 <sup>33</sup><br>5521*<br>5647<br>5485<br>4831*<br>5304*<br>5214<br>4866*<br>5597<br>4927*<br>4928<br>5649<br>5613/ | 1.55-7 3-2-1 3-2-3 3-4-2 4-1-2 4-6-2 4-6-4 4-6-10 4-10-0 4-10-6 4-10-10 4-12-8 4-16-20 5-1-1 5-2-2 5-4-4 5-5-1 5-8-7 5-8-7 5-10-3 | Fertal-Gro (T Mulch Ground Tobacco Stems) Espoma Organic Fertrell, Super Miracle Orga-Vite Lawn Fertilizer Davey Arbor Green Tree Food Patco's Allganic Holly-Tone Hoffman Azalea & Evergreen Food Liberty Fertilizer Swift Sure Bulb-Tone Black Magic African Violet Booster Sears Bulb Food Old Fox Fertilizer Atlas Fish Emulsion Fertilizer Fish Emulsion Fertilizer Brooksid's Nature's Evergreen New Era Fish Plant Food Corenco Fertilizer Liberty Fertilizer Electra Plant Food |

<sup>\*</sup> Small package sample. / Unregistered.

<sup>33</sup> Iron: Guaranteed, 0.01%; found, 0.71%.

TABLE 5.

## ANALYSES OF MIXED FERTILIZERS

|           |               | AINAI          | LIBES OF I        | VIIXED FEKT        | ILICERS            |           |
|-----------|---------------|----------------|-------------------|--------------------|--------------------|-----------|
| Mfr.      | org           | cent<br>anic   | Per cent<br>total | Per cent available | Per cent<br>water- | Per cent  |
| No.       | nitr<br>Sol.  | ogen<br>Insol. | nitrogen          | phosphoric<br>acid | soluble<br>potash  | magnesium |
|           | 501,          |                |                   |                    | Potati             |           |
|           |               |                |                   |                    |                    |           |
| 54        | 0.88          | 2.32           | 6.48              | 2.38               | 6.78               |           |
| 18        |               | 0.10           | 4.56              | 13.75              | 3.23               |           |
| 18        | 1.28          | 0.22           | 8.30              | 12.78              | 5.43               |           |
| 78        | 2.04          | 1.60           | 7.00              | 9. 93              | 5.80               |           |
|           |               |                |                   |                    |                    |           |
|           |               |                |                   |                    |                    |           |
| 54        | 0.80          | 0.74           | 12.50             | 4.88               | 7. 33              |           |
| 135       | 6.42          | 4.46           | 12.16             | 5. 18              | 8.11               | • • • •   |
| 135       | 6.48          | 4. 72          | 12.56             | 5.17               | 7.35               | • • • •   |
| 135       | 7. 86         | 3.72           | 12.72             | 5.10               | 7. 26              | • • • •   |
|           |               |                |                   |                    |                    |           |
| 10        | 17 12         | 0 00           | 10 52             | E 10               | 4 20               |           |
| 19<br>12  | 17.12<br>9.02 | 0.00<br>1.86   | 19.52<br>17.44    | 5.19<br>6.64       | 4.20<br>4.44       | • • • •   |
| 12        | 8.26          | 1.74           | 17.60             | 6.32               | 4.70               | • • • •   |
| 56        | 15.36         | 0.00           | 17.52             | 4.00               | 4.13               | • • • •   |
| 59        | 16.96         | 0.00           | 20.88             | 5. 78              | 6.17               |           |
| 114       | 17.64         | 0.00           | 21.20             | 5.09               | 5.15               |           |
|           |               |                |                   |                    |                    |           |
|           |               |                |                   |                    |                    |           |
| 41        |               |                | 1.50              | 0.75               | 7.64               |           |
| 44        | 0.48          | 1.64           | 4.56              | 3.46               | 1, 15              | • • • •   |
| 101       | 0.42          | 2.66           | 3.08              | 1.64               | 3.10               | • • • •   |
| 107       | 1.06          | 1.38           | 3.00              | 5.33               | 2.56               | • • • •   |
| 37<br>108 | 3.86<br>0.16  | 1.14<br>3.54   | 5.72<br>4.26      | 1.78<br>6.25       | 4.12               | • • • •   |
| 44        | 0.10          | 1.28           | 5.56              | 6.49               | 2.04<br>6.04       | • • • •   |
| 75        | 0.16          | 0.94           | 4. 92             | 10.26              | 10.61              | • • • •   |
| 78        | 0.72          | 0.58           | 4.00              | 2.76               |                    | • • • •   |
| 44        | 0.52          | 1.52           | 5.48              | 10.87              | 6.26               | • • • •   |
| 17        | 4.40          | 0.00           | 4.40              | 10.38              | 10.43              | • • • •   |
| 124       | 1.36          | 0.56           | 4.80              | 11.55              | 8.14               |           |
| 104       | 0.16          | 0.00           | 4.48              | 16.04              | 20.72              | • • • •   |
| 14        | 4.16          | 0.46           | 5.60              | 1.09               | 0.95               | • • • •   |
| 135       | 4.00          | 0.50           | 5.30              | 5.72               | 2.70               | • • • •   |
| 22<br>31  | 0.40          | 5.52           | 5.92<br>5.08      | 4.64               | 4.16               | • • • •   |
| 34        | 3.36<br>0.24  | 1.08<br>0.00   | 5.08<br>5.00      | 5.51<br>8.13       | 1.99<br>7.46       | • • • •   |
| 78        | 0.96          | 0.24           | 6.08              | 8.02               | 7. 80              |           |
| 138       | 0.34          | 2.30           | 5.28              | 10.65              | 3.07               | • • • •   |
|           |               |                |                   |                    |                    |           |

## TABLE 5. ANALYSES OF MIXED FERTILIZERS

|                            | 2111211            | 1010 OI WILLIAM I BICITEDERO                          |
|----------------------------|--------------------|-------------------------------------------------------|
| Station<br>No.             |                    | Ratio, grade and brand                                |
| 5//0/                      | F 10 2             | Plantus Diant Paul                                    |
| 5660/                      | 5-10- 3            | Electra Plant Food                                    |
| 5136*                      | 5-12- 9            | New Era African Violet Food                           |
| 5380 <sup>34</sup>         | 6- 3- 0<br>6- 3- 0 | Milorganite                                           |
| 5956 <sup>35</sup>         | 6- 3- 0<br>6- 6- 4 | Milorganite                                           |
| 5559*                      | 6- 6- 4            | Espoma Rose Food                                      |
| 5851                       | 6- 7- 4            | Espoma Rose Food                                      |
| 5591<br>5640 <sup>36</sup> | 6- 7- 4<br>6- 7- 5 | Lawncraft Shade Tree & Ornamental Shrub Food          |
| 5334*                      | 6- 8- 5            | Lebanon Azalea & Evergreen Food                       |
| 5955                       | 6- 8- 6            | Hoffman Concentrated Organic Bartlett Green Tree Food |
| 5278*                      | 6- 9- 5            | Patco Rose Food                                       |
| 5218                       | 6-10-10            | Old Fox Fertilizer with 1.2 Mg                        |
| 5656                       | 6-12- 4            | Lawncraft Seed Starter                                |
| 4963*                      | 7- 6-19            | Hyponex All Purpose Plant Food                        |
| 5486 <sup>37</sup>         | 7- 8- 5            | G & O Rose Food                                       |
| 5187*                      | 7- 8- 7            | Patco Broadleaved Evergreen Shrub Food                |
| 5464                       | 7- 8- 7            | Patco Shrub Food                                      |
| 5882 <sup>38</sup>         | 7- 9- 5            | Cascio's Rose Food                                    |
| 5740*                      | 7-10- 4            | Hubbard-Hall Bulb Food                                |
| 5644                       | 7-40- 6            | Magamp with K and 12.0 Mg                             |
| 5664*                      | 8- 8-12            | Happy Jo Liquid Concentrate Plant Food                |
| 5173 <sup>39</sup>         | 8-10- 4            | F & B Rose Food                                       |
| 5172 <sup>40</sup>         | 8-10- 6            | ReVive Rose Food                                      |
| 5773                       | 8-10-10            | Liberty Super Spud with 1.2 Mg                        |
| 5217                       | 8-10-10            | Old Fox Fertilizer with 1.2 Mg                        |
| 5523                       | 8-40- 0            | Magamp .                                              |
| 5932                       | 9-5-3              | Lawn Craft VFT Fortified Turf Food                    |
| 5184                       | 9-8-3              | Patco Lawn Food                                       |
| 5566 <i>/</i>              | 9-45-15            | Peter's Plant Starter                                 |
| 5202                       | 10- 7- 5           | Patco Evergreen Food                                  |
| 5243                       | 10-8-2             | Corenco Timberline Complete Tree Food                 |
| 5220/                      | 10-8-7             | Old Fox Tree Food                                     |
| 5809 <sup>41</sup>         | 10-8-7             | Ortho Liquid Evergreen & Azalea Food                  |
| 5200                       | 10- 8- 8           | Agrico A. C. R. Fertilizer                            |
| 4853                       | 11- 4- 6           | Golden Vigoro Lawn Food w. Crabgrass &                |
| - 100                      |                    | Insect Control                                        |
| 5492                       | 12- 7- 4           | Greenlife Azalea Food                                 |
| 4957                       | 12-16- 8           | Greenfield Double Action Evergreen &                  |
|                            |                    | Azalea Food                                           |

<sup>/</sup> Unregistered. Small package sample.

<sup>34</sup> Iron: Guaranteed, 3.0%; found, 4.13%.

<sup>35</sup> Iron: Guaranteed, 3.0%; found, 4.21%.

<sup>&</sup>lt;sup>36</sup> Iron: Guaranteed, 0.075%; found, 2.22%.

<sup>&</sup>lt;sup>37</sup> Iron: Guaranteed, 0.15%; found, 1.58%.

TABLE 5.
ANALYSES OF MIXED FERTILIZERS

| Mfr.             | Per          | cent         | Per cent     | Per cent     | Per cent     | Per cent  |
|------------------|--------------|--------------|--------------|--------------|--------------|-----------|
|                  | org          | anic         | total        | available    | water-       |           |
| No.              | nitr         | ogen         | nitrogen     | phosphoric   | soluble      | magnesium |
|                  | Sol.         | Insol.       |              | acid         | potash       |           |
|                  |              |              | /            |              | - (-         |           |
| 138              | 0.62         | 2.34         | 5.36         | 10.30        | 3.68         | • • • •   |
| 31               | 0.24         | 0.00         | 6. 72        | 13.70        | 9.64         | • • • •   |
| 125              | 0.38         | 5.38         | 5.76         | 3.47         | • • • •      | • • • •   |
| 125              | 0.40         | 5.60         | 6.00         | 4.45         | · · · ·      |           |
| 44               | 0.30         | 1.62         | 6.72         | 6.23         | 5.23         | • • • •   |
| 44               | 0.38         | 1.74         | 6.92         | 6.00         | 4.25         | • • • •   |
| <b>7</b> 8<br>88 | 1.44<br>1.84 | 1.06<br>1.18 | 6.48<br>7.74 | 7.12<br>7.30 | 4.62<br>7.54 | • • • •   |
| 75               | 0.46         | 5.38         | 6.00         | 8.52         | 5. 25        | • • • •   |
| 15               | 0.40         | 0.90         | 5.90         | 8.12         | 7. 20        | • • • •   |
| 108              | 0.20         | 3.54         | 7.86         | 9.39         | 5.00         | • • • •   |
| 103              | 0.00         | 0.34         | 6.40         | 9.36         | 10.56        | 2.26      |
| 78               | 1.36         | 0.00         | 6.96         | 2.49         | 4.26         | 2, 20     |
| 79               | 0.32         | 0.00         | 7.00         | 7.13         | 20.10        | • • • •   |
| 62               | 0.88         | 1.82         | 7.64         | 8.17         | 5.72         |           |
| 108              | 0.56         | 1.20         | 8.00         | 8.49         | 7.09         |           |
| 108              | 0.38         | 1.00         | 7. 96        | 7. 72        | 7. 74        |           |
| 27               | 0.82         | 2.16         | 8.32         | 9.07         | 6.73         |           |
| 78               | 0.80         | 2.28         | 6,52         | 2.21         | 7.01         |           |
| 63               | 1.16         | 5.28         | 7. 08        | 44.56        | 6.46         | 12.10     |
| 35               | 7.40         | 0.00         | 8.24         | 8.27         | 12.20        |           |
| 48               | 2.40         | 1.50         | 8.48         | 10.84        | 4.77         |           |
| 77               | 2.24         | 1.50         | 8.92         | 5,50         | 6.20         |           |
| 78               | 0.00         | 0.00         | 8.04         | 10.22        | 10.48        | 1.52      |
| 104              | 0.16         | 0.10         | 7.68         | 12.42        | 10.00        | 1.52      |
| 63               | 0.04         | 7.20         | 8.68         | 44.55        |              |           |
| 78               | 1.48         | 7.84         | 9.56         | 5.28         | 3.08         |           |
| 108              | 1.52         | 1.70         | 9.16         | 7. <u>74</u> | 3.60         |           |
| 112              | 0.24         | 0.00         | 9.36         | 45.32        | 15.53        |           |
| 108              | 0.72         | 0.90         | 10.08        | 7.43         | 5.36         |           |
| 34               | 3.44         | 3.46         | 2.76         | 8.72         | 2.30         |           |
| 104              | 0.80         | 2.86         | 2.04         | 7.44         | 7.18         |           |
| 29               | 10.40        | 0.00         | 10.80        | 8.33         | 7.08         | • • • •   |
| 6                | 3.34         | 0.48         | 2.68         | 7.22         | 8.55         | • • • •   |
| 135              | 6.48         | 4.48         | 12.16        | 4.10         | 6.97         |           |
| 66               | 7.44         | 1.82         | 11.60        | 6.14         | 4.61         |           |
| 42               | 1.76         | 0.16         | 14.40        | 19.41        | 9.00         | • • • •   |
|                  |              |              |              |              |              |           |

~~~ Indicates deficiencies.

³⁸ Iron: Guaranteed, 1.5%; found, 1.70%. Sulphur: Guaranteed, 3.0%; found, 6.56%.

³⁹ Iron: Guaranteed, 0..15%; found, 2.18%.

 $^{^{40}}$ Iron: Guaranteed, 0.25%; found, 0.28%.

⁴¹ Iron: Guaranteed, 0.40%; found, 0.44%. Boron: Guaranteed, 0.02%; found, 0.02%.

TABLE 5.

ANALYSES OF MIXED FERTILIZERS

| Station
No. | | Ratio, grade and brand |
|----------------|----------|---|
| 4878 | 14 3 3 | Scott's Halts Plus |
| | | Scott's Turf Builder Plus 4 |
| | | Grand Union Brand Lightweight Lawn Fertilizer |
| | | Scott's Dawn |
| | | Lively Lawn Food |
| | | Corenco Weed-B-Done |
| | | Armour Vertagreen Lightweight Lawn Food
with Magnex and 1.2 Mg |
| 4943 | 20- 5- 5 | Scott's Turf Builder Plus 1 |
| | | Scott's Turf Builder Plus 2 |
| | 20- 5-30 | |
| | | HH Fertilizer (100% Org. Nit.) |
| | 20-10- 8 | Asgrow Easy-Gro Lawn Food |
| 5296* | 20-10-15 | Instant Vigoro |
| 5949 | 22- 8- 4 | Asgrow Gro-Sod Lawn Food |
| | | Scott's Turf Builder |
| | | Fer-Mel Premium Lawn Food |
| 5575 | 25-12-12 | Mag-Gro Fairway Fertilizer |
| 5574 | 26-12-12 | Fer-Mel 50 Supreme Lawn Food |

^{*} Small package sample. / Unregistered.

⁴² Iron: Guaranteed, 0.10%; found, 1.05%.

TABLE 5.
ANALYSES OF MIXED FERTILIZERS

| Mfr. | Per cent
organic
nitrogen
Sol. Insol. | Per cent
total
nitrogen | Per cent
available
phosphoric
acid | Per cent
water-
soluble
potash | Per cent
magnesium |
|------|--|-------------------------------|---|---|-----------------------|
| | 501, 111501, | | aciu | potasii | |
| 123 | 10.06 4.34 | 14.40 | 3.39 | 3.03 | |
| 123 | 9.04 3.84 | 13.84 | 3.04 | 3.03 | • • • • |
| 65 | 0.88 1.06 | 13.12 | 6.97 | 5,32 | • • • • |
| 123 | 10.50 4.16 | 16.08 | 11.06 | 13.48 | • • • • |
| 92 | 0.64 - 2.00 | 16.72 | 6.51 | 2.34 | |
| 34 | 13.76 1.32 | 18.00 | 3.92 | 6.07 | • • • • |
| | | | | | |
| 11 | 15.00 2.60 | 19.84 | 6.50 | 11.44 | 1.54 |
| 123 | 5.84 | 20.48 | 4.98 | 5.04 | |
| 123 | 13.60 5.48 | 20.80 | 5.00 | 5.42 | |
| 112 | 9.60 0.00 | 20.08 | 4.86 | 30.63 | |
| 78 | 9.08 11.16 | 20.96 | 4,23 | 6.54 | |
| 12 | 8.64 2.20 | 19.04 | 9.96 | 8.47 | |
| 135 | 9.44 0.00 | 20.00 | 11.88 | 14.80 | |
| 12 | 13.44 2.08 | 22.56 | 8.52 | 4.03 | |
| 123 | 14.76 7.70 | 23.36 | 7.09 | 7.43 | |
| 97 | 18.88 0.00 | 25.60 | 13.51 | 10.61 | |
| 96 | 19.64 0.12 | 24.88 | 10.26 | 12.42 | |
| 97 | 14.24 10.28 | 27.84 | 7.33 | 13.02 | • • • • |

^{.....} Indicates deficiencies.

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TABLE 6.

ANALYSES OF SHEEP MANURE, ETC.

| Station
No. | Manufacturer, brand and dealer |
|-------------------|--|
| 5205 | Armour Cattle Manure. Armour Agricultural Chemical
Co., Atlanta, Ga. Sampled at Caldor's, Norwalk. |
| 5828 | Armour Sheep Manure. Armour Agricultural Chemical
Co., Atlanta, Ga. Sampled at Alexander's, Milford. |
| 5272 | Barnyard Gem Dehydrated Cow Manure. Farmer's Organic
Linwood, N.C. Sampled at Holdridge Farm Nursery,
Ledyard. |
| 4919 | Barnyard Gem Dehydrated Sheep Manure. Farmer's Organic, Linwood, N.C. Sampled at Clinton Grain Co., Inc., Clinton. |
| 5239 | Bovung. Walker-Gordon Laboratory Co., Plainsboro, N.J. Sampled at New Haven Rendering Co., West Haven. |
| 5614 | Bovung. Walker-Gordon Laboratory Co., Plainsboro, N.J. Sampled at A.N. Pierson, Inc., Cromwell. |
| 4962 | Corenco Sheep Manure & Inert Matter. Consolidated Rendering Co., Boston, Mass. Sampled at A.S. Labieniec, Kensington. |
| 5345 ¹ | Fertal-Gro Cow Manure - Tobacco Stem Bedding. Eastern Dehydrating Co., Lexington, N.C. Sampled at The Goos Lumber Co., Danbury. |
| 5475/ | Fertal-Gro Sheep Manure Compost. Eastern Dehydrating Co., Lexington, N.C. Sampled at Railroad Salvage, East Windsor. |
| 5741 | Fertal-Gro Sheep Manure & Tobacco Stem Bedding. Eastern Dehydrating Co., Lexington, N.C. Sampled at Nielsen's Garden Center, Darien. |
| 4952 | Fertie Composted Cow Manure. Organic Compost Corp. of Pa. Sampled at J. M. Fields Co., New Britain. |

[/] Unregistered.

¹ Chlorine: Found, 1.52%.

Commercial Fertilizers TABLE 6.

ANALYSES OF SHEEP MANURE, ETC.

| To
Nitro | ogen | Pl | nosphoric ac | eid | Tot
Pota
per | ash | |
|-------------|------|----------------------|----------------|--------------------|--------------------|------|----------|
| F | G | Citrate
insoluble | Total
found | Available
found | F | G | per cent |
| 2.04 | 2.00 | • • • • | 1.74² | ••• | 2.70 | 2.00 | 4.63 |
| 2.00 | 1.25 | 0.25 | 1.44 | 1.19 ² | 1.98 | 2.00 | 18.64 |
| 1.84 | 1.00 | 0.11 | 1.01 | 0.90² | 11.31 | 1.00 | 5.94 |
| 2.00 | 1.00 | 0.13 | 1.01 | 0.88 ² | 10.21 | 1.00 | 5.89 |
| 2.04 | 2.00 | 0.15 | 1.59 | 1.442 | 2.01 | 2.00 | 1.97 |
| 2.08 | 2.00 | 0.14 | 1.54 | 1.402 | 2.23 | 2.00 | 1.58 |
| 1.88 | 1.25 | •••• | 1.86² | • • • • | 2.67 | 2.00 | 22.58 |
| 2.04 | 2.00 | 0.08 | 1.14 | 1.06² | 7.65 | 7.00 | 5.04 |
| 1.68 | 1.50 | 0.10 | 1.09 | 0.99 ² | 6.74 | 5.00 | 6.04 |
| 1.80 | 2.00 | 0.10 | 0.92 | 0.82 ² | 9.00 | 5.00 | 6.72 |
| 1.80 | 1.00 | 0.22 | 1.46 | 1. 24 ² | 2.36 | 1.00 | 32.09 |

~~~ Indicates deficiencies.

<sup>&</sup>lt;sup>2</sup> Guaranteed, 1.00%.

#### TABLE 6.

## ANALYSES OF SHEEP MANURE, ETC.

| Station<br>No. | Manufacturer, brand and dealer                                                                                                      |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 5476           | Fertilife Composted Manure. Organic Compost Corp.,<br>Oxford, Pa. Sampled at Barnes Bros. Nursery Co.,<br>Wallingford.              |
| 4930           | Gardener's Composted Cow Manure. Organic Compost<br>Corp., Oxford, Pa. Sampled at J.M. Fields Co.,<br>Branford.                     |
| 5844           | Gardenure Composted Cow Manure. Organic Compost<br>Corp., Oxford, Pa. Sampled at King Cole of<br>Bridgeport, Inc., Bridgeport.      |
| 5846           | Gardener's Composted Poultry Manure. Organic Compost<br>Corp., Oxford, Pa. Sampled at King Cole of<br>Bridgeport, Inc., Bridgeport. |
| 4988           | Gardener's Composted Sheep Manure. Organic Compost<br>Corp., Oxford, Pa. Sampled at G. E. Madison,<br>Southington.                  |
| 5745 <i>/</i>  | Goulard & Olena, Inc., Skillman, N.J. Sampled at Renzulli Bros. Garden Center, Norwalk.                                             |
| 4944           | Hoffman Dehydrated Cow Manure. A.H. Hoffman, Inc.,<br>Landisville, Pa. Sampled at Barker's, Meriden.                                |
| 4980           | HH Composted Cow Manure. Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Scata's Fair, Wethersfield.                         |
| 5372*          | HH Composted Cow Manure. Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Edw. Malley Co., New Haven.                         |
| 4964*          | HH Composted Sheep Manure. Hubbard-Hall Chemical Co. Waterbury, Conn. Sampled at Woolworth's, Berlin.                               |
| 5651           | HH Composted Sheep Manure. Hubbard-Hall Chemical Co., Waterbury, Conn. Sampled at Hubbard-Hall Chemical Co., Portland.              |

<sup>\*</sup> Small package sample.

<sup>/</sup> Unregistered.

<sup>3</sup> Guaranteed, 2.00%.

# Commercial Fertilizers TABLE 6.

ANALYSES OF SHEEP MANURE, ETC.

| Nitro | Total Nitrogen Phosphoric acid per cent per cent |                   | Tot<br>Pota<br>per | ash                | Sand |      |           |
|-------|--------------------------------------------------|-------------------|--------------------|--------------------|------|------|-----------|
| F     | G                                                | Citrate insoluble | Total<br>found     | Available found    | F    | G    | per cent  |
|       |                                                  |                   |                    |                    |      |      |           |
| 1.56  | 1.50                                             | 0.09              | 1.80               | 1.713              | 1.66 | 1.00 | 37.98     |
| 1.64  | 0.50                                             | 0.16              | 1,33               | 1. 17 <sup>i</sup> | 1.77 | 0.50 | 32.13     |
| 1.20  | 0.50                                             | 0.11              | 0.95               | 0.841              | 0.70 | 0.50 | 53.84     |
| 1.48  | 0.50                                             | 0.17              | 1.13               | 0.96 <sup>1</sup>  | 1.16 | 0.50 | 48.38     |
| 1.44  | 0.50                                             | 0.16              | 1.17               | 1.01 <sup>2</sup>  | 1.41 | 0.50 | 49.52     |
| 7.00  | 0.50                                             | 0.58              | 9.01               | 8.43 <sup>1</sup>  | 1.42 | 0.50 | • • • • • |
| 2.52  | 2.00                                             | 0.15              | 1.12               | 0.97 <sup>2</sup>  | 1.90 | 1.00 | 7.22      |
| 1.48  | 1.00                                             | 0.16              | 1.42               | 1. 26 <sup>2</sup> | 1.32 | 1.00 | 46.56     |
| 1.28  | 1.00                                             | 0.14              | 1.30               | 1.16               | 1.23 | 1.00 | 2.71      |
| 2. 12 | 1.00                                             | 0.23              | 1.63               | 1.40 <sup>2</sup>  | 2.61 | 1.00 | 35.89     |
| 1.56  | 1.00                                             | 0.19              | 1.54               | 1.35               | 1.63 | 1.00 | 45.17     |

~~~ Indicates deficiencies.

¹ Guaranteed, 0.50%.

² Guaranteed, 1.00%.

TABLE 6.

ANALYSES OF SHEEP MANURE, ETC.

| Station
No. | Manufacturer, brand and dealer |
|----------------|---|
| 4933 | Manure's Best Composted Cow Manure. Organic Compost
Corp., Oxford, Pa. Sampled at Bradlee's, E. Haven. |
| 5478/ | McNair's Organure Dehydrated Cow Manure. McNair
Farms, Laurinbury, N.C. Sampled at Renzulli Bros.
Garden Center, Norwalk. |
| 4969/ | O'C Brand Dehydrated Cow Manure. Farmers Organic
Corp., Ransomville, N.Y. Sampled at Comstock Ferre
& Co., Wethersfield. |
| 5294/ | Our Ranch Dehydrated Cow Manure. Thomason Ranch, Div. Thomason Industries, Inc., Fayetteville, N.C. Sampled at Moore's Super Stores, Inc., Newington. |
| 5763/ | Ramshorn Brand Sheep Manure. Natural Plant Food Co.,
Inc., Oklahoma City, Okla. Sampled at Adams-
Brainard, Inc., Thompsonville. |
| 4847 | Sears Composted Sheep Manure. Sears, Roebuck & Co.,
Chicago, Ill. Sampled at Sears, Roebuck & Co., Hamden. |
| 4949 | Squire Applegate Composted Cow Manure. Comark Corp., Syracuse, N.Y. Sampled at Agway, Inc., Kensington. |
| 5182/ | Squire Applegate Composted Sheep Manure. Comark Corp., Syracuse, N.Y. Sampled at Agway, Inc., Yantic. |
| 5268/ | Squire Applegate Composted Sheep Manure. Comark Corp., Syracuse, N.Y. Sampled at Mystic Oral School, Mystic. |
| 5768* | Swiss Farms Cow Manure. Swiss Farms, Inc., Philmont, N.Y. Sampled at Thompsonville Garden Center-Nursery, Thompsonville. |

^{*} Small package sample.

[/] Unregistered.

¹ Guaranteed, 0.50%.

Commercial Fertilizers TABLE 6.

ANALYSES OF SHEEP MANURE, ETC.

| Tot
Nitro | ogen | Ph | osphoric ac | eid | Tot
Pota
per o | ash | Sand |
|--------------|------|-------------------|----------------|--------------------|----------------------|------|----------|
| F | G | Citrate insoluble | Total
found | Available
found | F | G | per cent |
| 1.40 | 0.50 | 0.17 | 1.37 | 1.20 ¹ | 1.44 | 0.50 | 48.43 |
| 2.04 | 2.00 | 0.20 | 2.08 | 1.88² | 2.11 | 2.00 | 9.44 |
| 2.24 | 2.00 | 1.07 | 2.42 | 1.35 ² | 2.24 | 2.00 | 5.51 |
| 1.36 | 1.00 | 0.12 | 0.77 | 0.65 ² | 2.07 | 1.00 | 21.33 |
| 1.80 | 2.00 | 0.18 | 0.79 | 0.61 ² | 1.94 | 2.00 | 33.64 |
| 1.56 | 0.50 | 0.19 | 1.61 | 1.421 | 2.17 | 0.50 | 45.19 |
| 1.72 | 1.00 | 0.21 | 1.60 | 1.39 ² | 2.78 | 1.00 | 38.82 |
| 1.24 | 1.00 | 0.12 | 1.33 | 1.212 | 2.04 | 1.00 | 2.83 |
| 1.76 | 1.00 | 0.21 | 1.31 | 1.10 ² | 2.64 | 1.00 | 40.67 |
| 1.72 | 2.00 | 8.37 | 10.82 | 2.45 ² | 1.72 | 1.00 | 8.71 |

~~~ Indicates deficiencies.

<sup>&</sup>lt;sup>2</sup> Guaranteed, 1.00%.

### TABLE 7.

## ANALYSES OF LIMESTONE AND SIMILAR MATERIALS

|                              | ANALYSES OF LIMESTONE AND SIMILAR MATERIALS                                                                                                                                                               |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Station<br>No.               | Manufacturer or dealer, brand and place of sampling                                                                                                                                                       |
|                              | ALLYNDALE LIME CO., East Canaan, Conn.                                                                                                                                                                    |
| 6258                         | Ground Limestone. Sampled by Agricultural Stabilization & Conservation Service, U.S.D.A., Wapping.                                                                                                        |
|                              | CONKLIN LIME CO., Canaan, Conn.                                                                                                                                                                           |
| 6260                         | Ground Limestone. Sampled by Agricultural Stabilization & Conservation Service, U.S.D.A., Wapping.                                                                                                        |
|                              | LEE LIME CORP., Lee, Mass.                                                                                                                                                                                |
| 4896                         | Hydrated Lime. Sampled by Hatheway-Steane Corp., Suffield.                                                                                                                                                |
|                              | MANUFACTURER UNKNOWN                                                                                                                                                                                      |
| 5038                         | Hi Calcium Lime. Sampled by Culbro Tobacco Div., West Hartford.                                                                                                                                           |
| 5030                         | Hydrated Lime. Sampled by Culbro Tobacco Div., West Hartford.                                                                                                                                             |
| 5040                         | Land Plaster. Sampled by Culbro Tobacco Div., West Hartford.                                                                                                                                              |
| 4687<br>5863<br>5864<br>5865 | Limestone. Sampled by Warren L. Shippee, Stratford. Limestone. Sampled by Theodore F. Litwin, Storrs. Limestone. Sampled by Theodore F. Litwin, Storrs. Limestone. Sampled by Theodore F. Litwin, Storrs. |
|                              | NEW ENGLAND LIME CO., Canaan, Conn.                                                                                                                                                                       |
| 4895                         | Hydrated Lime. Sampled by Hatheway-Steane Corp.,<br>Suffield.                                                                                                                                             |
| 6259                         | Ground Limestone. Sampled by Agricultural Stabilization & Conservation Service, U.S.D.A., Wapping.                                                                                                        |

## Commercial Fertilizers

### TABLE 7.

## ANALYSES OF LIMESTONE AND SIMILAR MATERIALS

| ox                                        | cium<br>ide<br>cent | Magne<br>oxi<br>per o            | de      |
|-------------------------------------------|---------------------|----------------------------------|---------|
| F                                         | G                   | F                                | G       |
| 30 <b>.</b> 56                            |                     | 20,72                            |         |
| 27, 32                                    |                     | 18.70                            |         |
| 70.05                                     | ••••                |                                  |         |
| 69.73                                     | 65.00               | • • • • •                        | • • • • |
| 67.86                                     | 65.00               | • • • •                          | ••••    |
| 32.53<br>30.07<br>29.87<br>31.71<br>27.62 | 30.00               | 21.34<br>37.61<br>39.28<br>33.56 |         |
| 40.54                                     | ••••                |                                  |         |
| 30.84                                     | ••••                | 37.97                            | • • • • |

## TABLE 8.

## ANALYSES OF OTHER MISCELLANEOUS MATERIALS 1

| Station<br>No. | Material                                                          |
|----------------|-------------------------------------------------------------------|
| 5511<br>5876   | Basic slag <sup>2</sup>                                           |
| 5789           | ''Hoffman Aluminum Sulphate''<br>Incinerator fly ash <sup>3</sup> |
| 6206           | Paper board sludge <sup>4</sup>                                   |
| 6088           | Polyphosphate boiler compound                                     |
| 6089           | Polyphosphate boiler compound                                     |
| 6222           | Poultry manure                                                    |
| 6223           | Poultry manure                                                    |
| 6224           | Poultry manure                                                    |
| 6225           | Poultry manure                                                    |
| 6226           | Poultry manure                                                    |
| 6227           | Poultry manure                                                    |
| 6228           | Poultry manure                                                    |
| 6229<br>6230   | Poultry manure                                                    |
| 6231           | Poultry manure Poultry manure                                     |
| 4558           | Sedimentary deposit                                               |
| 4746           | "20 Mule Team Fertilizer Borate 46 Coarse"                        |
| 5989           | Unknown fertilizer                                                |

<sup>1</sup> Figures are in per cent.

<sup>&</sup>lt;sup>4</sup> pH 6.7.

<sup>&</sup>lt;sup>5</sup> Guaranteed 14.3%.

## Commercial Fertilizers TABLE 8.

### ANALYSES OF OTHER MISCELLANEOUS MATERIALS1

| Total<br>nitrogen | Total<br>phosphoric<br>acid | Water-<br>soluble<br>potash | Water     | Ash     | Aluminum | Boron       |
|-------------------|-----------------------------|-----------------------------|-----------|---------|----------|-------------|
| 0.02              | 0.03                        | 0.00                        |           |         | 0.07     | 0.05        |
|                   | • • • •                     | • • • •                     | ••••      |         |          | • • • •     |
| 0.10              | 1.76                        |                             |           |         | 2.50     | 0.10        |
| 0.03              | 0.03                        | 0.03                        | 90.49     | 2.29    | • • • •  |             |
| • • • •           | 54.21                       | • • • •                     | • • • • • |         | • • • •  |             |
|                   | 53.70                       | • • • •                     |           |         | • • • •  |             |
| 4.20              | 3.42                        | 2.10                        | 22.39     |         |          |             |
| 3.77              | 3.96                        | 2.56                        | 24.08     |         | • • • •  |             |
| 4.63              | 3.38                        | 1.99                        | 33.00     |         | • • • •  |             |
| 3.11              | 2.52                        | 1.44                        | 51.44     |         | • • • •  |             |
| 3.44              | 3.57                        | 1.77                        | 35.23     |         | • • • •  | • • • •     |
| 3.66              | 3.31                        | 1 <b>. 7</b> 9              | 33.60     | • • • • |          | • • • •     |
| 3.11              | 2.50                        | 1.58                        | 47.55     | • • • • | • • • •  |             |
| 3.87              | 3, 33                       | 1.91                        | 23.52     | • • • • | • • • •  | • • • •     |
| 2.43              | 2. 24                       | 1.41                        | 23.52     | • • • • | • • • •  | • • • •     |
| 2.67              | 2,52                        | 1.48                        | 19.04     | • • • • | • • • •  |             |
| 0.06              | 0.05                        | 1.66                        | • • • • • | • • • • | • • • •  |             |
| ; : ; ;           |                             |                             | • • • • • | • • • • | • • • •  | $14.67^{5}$ |
| 6.16              | 17.79                       | 5.52                        |           |         | • • • •  |             |

<sup>&</sup>lt;sup>2</sup> Citrate-insoluble phosphoric acid, 0.02%.
"Available" phosphoric acid, 0.01%.
Calcium, 9.5%; magnesium, 5.6%; iron, 2.0%; zinc, 1.4%; copper, 0.01%.

<sup>&</sup>lt;sup>3</sup> Calcium, 5.1%; magnesium, 0.68%; iron, 2.3%; zinc, 0.40%; copper, 0.09%; manganese, 0.26%.

## TABLE 9.

## PHOSPHORIC ACID DISTRIBUTION IN POTATO GRADE FERTILIZERS

|                | IN POTATO GRADE FERTILIZERS                                                             |
|----------------|-----------------------------------------------------------------------------------------|
| Station<br>No. | Manufacturer or distributor and brand                                                   |
|                | 5-10-10                                                                                 |
| 4821           | Agway, Inc., Syracuse, N.Y. Agway                                                       |
| 4823           | Same. Eastern States                                                                    |
| 5537           | American Agricultural Chemical Co., North Weymouth, Mass. AA Quality                    |
| 5010           | Same. Agrico for Potatoes                                                               |
| 5826           | Armour Agricultural Chemical Co., Atlanta, Ga. Armour Vertagreen Acid Loving Plant Food |
| 5148           | Blackstone Guano Co., Inc., Richmond, Va. Finelawn Azalea & Camellia Food               |
| 5950           | Breck's Div., Asgrow Seed Co., Boston, Mass. Breck's Garden Gro                         |
| 5396           | Cadwell & Jones, Inc., Hartford, Conn. C & J Homogeneous Granulated                     |
| 4911           | Consolidated Rendering Co., Boston, Mass. Corenco                                       |
| 5188           | Same. Corenco                                                                           |
| 5952           | Same. Corenco Liquid Concentrate                                                        |
| 5764           | Faesy & Besthoff, Inc., Edgewater, N.J. F & B Azalea, Camellia & Rhododendron Food      |
| 5557           | Federal Chemical Co., Cranbury, N.J. Federal Lawn Life for Gardens                      |
| 4978           | Goulard & Olena, Inc., Skillman, N.J. G & O Tomato & Fruit Food                         |
| 5535           | W.R. Grace & Co., Davison Chemical Div., Baltimore, Md. Davco 3-G Granulated            |
| 5333           | A.H. Hoffman, Inc., Landisville, Pa. Hoffman for Garden                                 |
| 5282           | Hubbard-Hall Chemical Co., Waterbury, Conn. Liberty                                     |
| 5509           | Same. Liberty                                                                           |
| 5516           | Same. Liberty                                                                           |
| 5717           | Same. Liberty                                                                           |
| 5518           | Same. Liberty Contains Chlordane                                                        |
| 4985           | Same. Liberty                                                                           |
| 5119           | Same. Liberty                                                                           |

# Commercial Fertilizers TABLE 9.

## PHOSPHORIC ACID DISTRIBUTION IN POTATO GRADE FERTILIZERS

| I                 | Percentage of available             |           |       |                                        |
|-------------------|-------------------------------------|-----------|-------|----------------------------------------|
| Water-<br>soluble | Citrate-soluble (not water-soluble) | Insoluble | Total | phosphoric<br>acid soluble<br>in water |
|                   |                                     |           |       |                                        |
| 3.28              | 6.67                                | 0.35      | 10.30 | 33.0                                   |
| 2.26              | 7.80                                | 0.26      | 10.32 | 22.5                                   |
| 2 51              | 7.04                                | 0.24      | 0.00  | 2/ 2                                   |
| 2.51              | 7.04                                | 0.34      | 9.89  | 26.3                                   |
| 4. 74             | 5.03                                | 0.31      | 10.08 | 48.5                                   |
| 5,24              | 4.99                                | 0.75      | 10.98 | 51.2                                   |
| 4.87              | 4.56                                | 0.36      | 9.79  | 51.7                                   |
| 4.53              | 5.48                                | 0.13      | 10.14 | 45.3                                   |
| 6.04              | 4.47                                | 0.31      | 10.82 | 57.5                                   |
| 5.38              | 4.79                                | 0.13      | 10.30 | 52.9                                   |
| 5.20              | 4.97                                | 0.15      | 10.32 | 51.1                                   |
| 10.14             | 0.00                                | 0.00      | 10.14 | 100.0                                  |
| 7. 11             | 3.02                                | 0.40      | 10.53 | 70.2                                   |
| 5.34              | 4.60                                | 0.30      | 10.24 | 53.7                                   |
| 6.51              | 3.25                                | 0.48      | 10.24 | 66.8                                   |
| 5.39              | 4.74                                | 0.20      | 10.33 | 53.2                                   |
| 9.10              | 1.44                                | 0.12      | 10.66 | 86.3                                   |
| 4.16              | 6.76                                | 0.19      | 11.11 | 38.1                                   |
| 7.43              | 2.64                                | 0.15      | 10.22 | 73.8                                   |
| 7.45              | 2.51                                | 0.16      | 10.12 | 76.4                                   |
| 3.85              | 6.64                                | 0.18      | 10.67 | 36.7                                   |
| 7.02              | 2.57                                | 0.19      | 9.78  | 73.2                                   |
| 8.15              | 1.87                                | 0.17      | 10.19 | 81.3                                   |
| 4.81              | 5.64                                | 0.15      | 10.70 | 45.6                                   |

#### TABLE 9.

## PHOSPHORIC ACID DISTRIBUTION IN POTATO GRADE FERTILIZERS

| Station<br>No. | Manufacturer or distributor and brand                                              |
|----------------|------------------------------------------------------------------------------------|
| 5655           | Same. Liberty with 2 lbs. Actual Disyston (POISON)                                 |
| 5772           | Old Fox Agricultural Sales, Inc., East Providence, R.I.<br>Old Fox                 |
| 5856           | Same. Old Fox with 1.2 Magnesium                                                   |
| 5562           | Olin Mathieson Chemical Corp., Little Rock, Ark. Olin                              |
| 5295           | Swift & Co., AgriChem Div., New Haven, Conn. Vigoro Azalea & Camellia Food         |
| 5329           | Same. Vigoro Azalea & Camellia Food                                                |
|                | 6-8-8                                                                              |
| 5232           | Consolidated Rendering Co., Boston, Mass. Corenco with 1.2 Magnesium               |
| 5940           | Hubbard-Hall Chemical Co., Waterbury, Conn. Liberty Super Spud with 1.2 Magnesium  |
| 5210           | Old Fox Agricultural Sales, Inc., East Providence, R.I. Old Fox with 1.2 Magnesium |
|                | 8-12-12                                                                            |
| 5953           | *Consolidated Rendering Co., Boston, Mass. Corenco with 0.9 Magnesium              |
| 5775           | Hubbard-Hall Chemical Co., Waterbury, Conn. <u>Liberty</u> with 1.2 Magnesium      |
|                | 10-10-10                                                                           |
| 4810           | Agway, Inc., Syracuse, N.Y. Agway Granular                                         |
| 5011           | American Agricultural Chemical Co., Carteret, N.J. AA Quality                      |
| 5495           | Same. Agrico for Top Dressing                                                      |
| 4971           | Consolidated Rendering Co., Boston, Mass. Corenco                                  |
| 5534           | W.R. Grace & Co., Davison Chemical Div., Baltimore, Md. Davco 3-G Granulated       |
| 5935           | Hubbard-Hall Chemical Co., Waterbury, Conn. Lawn<br>Craft Turf Food (25% St. Org.) |
| 4821           | Same. Liberty                                                                      |
| 5122           | Same. Liberty                                                                      |
| 5139           | Same. Liberty                                                                      |

# Commercial Fertilizers TABLE 9.

## PHOSPHORIC ACID DISTRIBUTION IN POTATO GRADE FERTILIZERS

|                   | IN TOTALO GRAD                      | D 1 DK(11D12 | 1110  |                                        |
|-------------------|-------------------------------------|--------------|-------|----------------------------------------|
|                   | Percentage of available             |              |       |                                        |
| Water-<br>soluble | Citrate-soluble (not water-soluble) | Insoluble    | Total | phosphoric<br>acid soluble<br>in water |
| 5.08              | 4.25                                | 0.26         | 9.59  | 54.5                                   |
| 4.20              | 5.20                                | 0.09         | 9.49  | 44.7                                   |
| 4.04              | 6.20                                | 0.22         | 10.46 | 39.5                                   |
| 3.29              | 7.65                                | 0.29         | 11.23 | 30.1                                   |
| 6.73              | 3.28                                | 0.12         | 10.13 | 67.2                                   |
| 5.68              | 3.17                                | 0.68         | 9.53  | 64.2                                   |
|                   |                                     |              |       |                                        |
| 4.55              | 3.47                                | 0.08         | 8.10  | 56.7                                   |
| 3.88              | 4.35                                | 0.15         | 8.38  | 47.1                                   |
| 1.98              | 6.63                                | 0.11         | 8.72  | 23.0                                   |
| 6.69              | 5.09                                | 0.17         | 11.95 | 56.8                                   |
| 4.48              | 7.29                                | 0.50         | 12.27 | 38.1                                   |
| 1.85              | 8.53                                | 0.14         | 10.52 | 17.8                                   |
| 4.88              | 5.40                                | 0.34         | 10.62 | 47.5                                   |
| 3.53              | 6.27                                | 0.26         | 10.06 | 36.0                                   |
| 6.17              | 3.99                                | 0.10         | 10.26 | 60.7                                   |
| 5.61              | 4.08                                | 0.26         | 9.95  | 57.9                                   |
| 5.81              | 4.19                                | 0.16         | 10.16 | 58.1                                   |
| 4.83              | 4.76                                | 0.17         | 9.76  | 50.4                                   |
| 5.18              | 4.80                                | 0.16         | 10.14 | 51.9                                   |
| 4.72              | 4.78                                | 0.20         | 9.70  | 49.7                                   |
|                   |                                     |              |       |                                        |

## TABLE 9.

## PHOSPHORIC ACID DISTRIBUTION IN POTATO GRADE FERTILIZERS

| Station<br>No. | Manufacturer or distributor and brand                                                         |
|----------------|-----------------------------------------------------------------------------------------------|
| 5252           | Same. Liberty                                                                                 |
| 5305           | Same. Liberty                                                                                 |
| 4993           | Same, Liberty Contains Aldrin                                                                 |
| 5603           | Same, With 10 lbs. Borax per Ton                                                              |
| 5140           | International Minerals & Chemical Corp., Woburn, Mass. New Formula Rainbow Premium Plant Food |
| 5137           | Same, New Formula Super Rainbow Premium Plant Food                                            |
| 5135           | Old Fox Agricultural Sales, Inc., East Providence, R.I. Old Fox                               |
| 5719           | Plantabbs Corp., Timonium, Md. <u>Plantabbs Liquid Plant</u><br>Food                          |

# Commercial Fertilizers TABLE 9.

## PHOSPHORIC ACID DISTRIBUTION IN POTATO GRADE FERTILIZERS

| I                 | Percentage of available             |           |       |                                        |
|-------------------|-------------------------------------|-----------|-------|----------------------------------------|
| Water-<br>soluble | Citrate-soluble (not water-soluble) | Insoluble | Total | phosphoric<br>acid soluble<br>in water |
| 7.16              | 2.99                                | 0.27      | 10.42 | 70.5                                   |
| 5.41              | 3.57                                | 0.18      | 9.16  | 60.2                                   |
| 2.56              | 6.45                                | 1.03      | 10.04 | 28.4                                   |
| 5.09              | 4.63                                | 0.15      | 9.87  | 52.4                                   |
| 6.37              | 2.74                                | 0.18      | 9.29  | 69.9                                   |
| 6.61              | 2.78                                | 0.14      | 9.53  | 70.4                                   |
| 4.96              | 4.58                                | 0.02      | 9.56  | 52.0                                   |
| 9.97              | 0.63                                | 0.00      | 10.60 | 94.1                                   |

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